

small air forces observer

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October 2014

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North Korean People's Air Force at War: Part 12
Royal Canadian Navy Piasecki HUP Helicopters
Afghanistan Military Aircraft Insignia
Dutch Military Aviation 1913-1914
Nepal Army Air Force Miscellany

vol. 38 no. 2 (150)

October 2014



25. Lt. G.D. Spandaw (NEI Army) crashed after take-off from Soesterberg on 2 July 1914. He was badly injured and died next morning in the hospital.



26. Lt. Spandaw in the Deperdussin in which he fatally crashed.



27. The inventory taken over by the LVA at Soesterberg from the bankrupt Maatschappij voor Luchtvaart included this V&L (Verwey & Lugard) monoplane. It received serial LA9 and was intended as taxiing trainer. Behind it may be the Grote van Meel.



28. Lt. Coblijn about to take off in his LA4. At right mechanic J. Verhagen,



29. Lt. van Heijst in the "Brik".

SMALL AIR FORCES OBSERVER

The Journal of the Small Air Forces Clearinghouse

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COVER COMMENTS: HUP 16621 '245' arrives at an unknown location, with the late applied Vulcano Red narrow fuselage band. *Photo: DND.*

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AUSTRALIA

AUSTRALIAN PLASTIC MODELLERS ASSOCIATION

(APMA, PO Box 51, Strathfield, NSW 2135; 4 issues airmail A\$40. International payment is best handled via Paypal at iansharyn@bigpond.com.au). Web Site: www.apma.org. All articles have b&w or color photos and excellent scale drawings.

1-14 (28 pages) "Vickers Wellesley" 4 pages on building the 1/72-scale Matchbox kit. "US Navy 'Dazzle' Camouflage Schemes" 4 Pages inc. four 3-view drawings [BT-1, F2A (2), & TBD]. "Air Tractor Agricultural and Fire Fighting Aircraft Variants" 6 pages inc. 2 photos and a 1/72- scale 3-view drawing of AT-402. Non-aviation articles are: Vickers 6 Ton Tank", "An Alternative to Plastic: Small Scale AFVs and Softskins", "'Uad' Class Patrol Vessels in the SCW", and "The Thales Australia Hawkei".[Ed: This is the first of the new electronic APMA – a .pdf file of 3.74 Mb.]

AUSTRIA

ÖFH NACHRICHTEN (Österreichische Flugzug Historiker, Pfenninggldf 18/2/14, A-1160 Wien. Write for free sample.

1/14 (44 pages) "Aufstellung und Einsatz der Flik 6" 9 pages inc. 12 photos. "Vickers Viscount 745D" 7 pages inc. 14 photos and 5 color profile drawings.

2/14 (44 pages) "Phönix D.III in Schweden" 5 pages inc. 6 photos. "Meindl A VII A-138" 11 pages inc. 3 photos and a 3-view scale drawing. "Restaurierung SG 38" 3 pages inc. 9 photos.

FRANCE

AVIONS: Toute l'Aeronautique et son Histoire (Lela Presse, 29 rue Paul Bert, 62230 Outreau, France. 71 euro for 6 issues). Website: www.avions-bateaux.com. E-mail: contact@avions-bateaux.com.

Mai/Juin 2014 (96 pages) "Complément aux de Havilland DH-88 'Comet' Français" 2 pages inc. 4 photos of Comet in French AF markings. "6 Juin 1944: Le jour le plus long" 21 pages inc. 28 photos, and 7 color profiles (P-47D, Spitfire LF.IX, AW Albemarle, Airspeed Horsa, Short Stirling, Douglas C-47, & Waco CG-4A). "Le Toupolev Tu-95 Bear

et ses dérivés" 12 pages inc. 19 photos. "Mick Mannock: Fut-il le plus grand as de l'empire Britannique en 14-18?" 9 pages inc. 17 photos, one color painting, one color profile (SE-5A), and a table of victories. "Le Mitsubishi Ki-46 Dinah" 16 pages inc. 30 photos and 6 color profiles. "Confettis et Bouteilles pour la traverse du nouvel an!" 3 pages inc. 4 photos (Serb Framan F.40) and one map. "Junkers K47" L'ancêtre du stuka" 17 pages inc. 23 photos, 3 color profiles, one color 4-view, and 3 factory 3-view drawings. "Charles Paoli: De la campagne de France à la guerre d'Indochine" 8 pages inc. 17 photos and 2 color profiles (MB.210 & Glenn Martin 167F).

GERMANY

FLIEGER REVUE X (Verlag Fliegerrevue, Herrn Detlef Billig, Oraniendamm 48, D-13469 Berlin. 4 issues per year, \$66 surface. Payment by check drawn on German bank)

#46 (114 pages) "Siemens-Schuckert D.III in der Schweiz" 10 pages inc. 9 photos (3 Swiss) and 8 color profiles (1 Swiss, 1 Belgian, & 6 German). "Die Zivikkufflotte der UdSSR: Tiel 3" 20 pages inc. 36 photos. "Bf 110: Messerschmitt Zerstörer" 20 pages inc. 27 photos. "Nachtjagd-Ass: Martin Drewers" 20 pages inc. 39 photos & 8 profiles [Fw 44, He 51, HS 123, Bf 110 (4), & Bf 110 (Iraq)]. "Filmstars mit Propeller" 14 pages inc. 23 photos. "Das Geheimnis des Atombunkers" 4 pages inc. 9 photos. "Kolumbiens fliegende Polizei" 14 pages inc. 30 photos of a/c used by the Colombian Police in combating drug smugglers and terrorists from the first Cessna 206 to the Blackhawk helicopters.

#47 (114 pages) "Gleiter auf der ILA 1909" 4 pages inc. 8 photos from Franfort Aeronautical Exposition. "Badische Luftfahrt-Pioniere" 8 pages inc. 13 photos of early a/c. "Schwimmende Katapultinseln" 18 pages inc. 22 photos (He 12, Do Wal, Bv 139). "Die Wiege der deutschen Luftwaffe in der Sowjetunion" 16 pages inc. 36 photos (Fokker F VII & F XIII; Rohbach Ro VIII; Heinkel HD-17, HD-21, HD-41, HD-38, & HD-59; Junkers A-20; Albatros L 78; and Do 11). "Frankreiches modernster Jäger" 18 pages on MS.406

inc. 15 photos and 11 color profiles [French (7), Finnish (3), Swiss (1)]. "Wachter der Neutralität" 6 pages and 8 photos of Swiss MS.406. "Kampf um Malta" 12 pages inc. 23 photos. "Martin B-57 Canberra für geheime Missionen über Deutschland" 22 pages inc. 33 photos.

IPMS Deutschland Journal. Website: ipmsdeutschland.de. All color.

Subscription: Europe 36 € others 40 €

47/1 2014 (40 pages). A new small format (144mm by 208mm), presumably to save on postage. "Wingman Models 1/48 Alpha jet" 6 pages inc. 15 photos. "Spotterday" 7 pages inc. 23 photos. "Revell/Monogram 1/48 PV-1 Ventura" 17 photos. "Siga Model 1/72 Fury FJ-1" 4 pages inc. 19 photos.

ITALY

JP4 Menslie di Aeronautica e Spazio. Via XX Settembre, 60-50129 Firenze, Italy. Email: jp4@dueservice.com. Website: www.ediservice.it.

Dicembre 2013 (100 pages) "Black Eagles" 6 pages on South Korea's aerobatic team's KAI T-50B inc. 5 photos.

Gennaio 2014 (100 pages) Color photos: Saudi Arabia VC-130H '486'; Singapore M-346 '327'; Cambodia Z-9; India Tu-142M; Dutch Curtiss Hawk I, & Afghani OV-10. "Carrier Qualification" 8 pages inc. 6 photos of Italian Sea Harriers. "Aviatori a Tripoli" 2 pages with 9 photos (Bleriot, dirigible P2, & Drachen). "Incidenti Militari" ¾ page.inc. 3 photos (Serbia J-22B Oro).

Febbraio 2014 (100 pages) "La RoKAF a Cheongju" 2 pages with 8 photos (F-15K; Ka-32; F-4E; KAI FA-50, KT-1, & KUH-1; CN235; and 737 AEW?&C). "Incidenti Militari" 1 page inc. 3 photos (Malaysia S-61, & Norway F-16).

Marzo 2014 (100 pages) Color photo: Polish PZL-130 Orlik. "Incidenti Militari" 1½ pages inc 4 photos.

Aprile 2014 (100 pages) Color photos: Qatar C-17; Kuwait C-17; & Spain Typhoon. "In missione con marines colombiani" 6 pages inc. 9 photos (Bell 212). "Incidenti Militari" 1 inc 4 photos (Algeria C-130H & Ecuador HAL Dhruv).

See more Abstracts on page 70.

The LVA from July 1913 to August 1914

Frits Gerdessen

On 1 July 1913, a Royal Decree was issued authorizing the formation of an aviation unit at Soesterberg. The unit was to be under the direct command of the Chef van den Generalen Staf (Chief of the General Staff, CGS). The decree specified the following:

- It is preferred that volunteers be posted with the unit for an indefinite period.
- The CGS nominates a commanding officer.
- The other personnel will be posted by the CGS in consultation with their units.
- To become an officer pilot, it is required that:
 - a. he obtains a FAI flying certificate.
 - b. he obtains the military certificate.
- After obtaining the military certificate, the officer must commit to serve at least 8 years as a military pilot, 3 years on active duty and 5 years as reserve pilot.
- Until a uniform has been decided upon for the unit, personnel will wear the uniforms of their units of origin.
- The unit will consist of:
 - 1 captain, commanding officer.
 - captains and lieutenants as required.
 - 1 W/O, sgt.major or sergeant storeskeeper.
 - 1 W/O, sgt.major or sergeant administration
 - 1 quartermaster
 - 1 sergeant
 - 2 leading engineers
 - 23 corporals and men
 - 1 medic

The first aircraft

As soon as the State had acquired Soesterberg, steps were taken to adapt it for military use. In April of 1913, the first contractors were already engaged in work on the buildings. This was arranged by the (office of) the Senior Engineer (EaI = Eerstaanwezend Ingenieur) in Amersfoort. The engineers regiment had a special branch, responsible for all aspects of military infrastructure: the "Dienst der Genie" (Engineering Service). At first the Dienst had a small office at Soesterberg to supervise the work done by the contractors, but after some years a permanent office was built. The building activities, started in 1913, continued well after 1920.

The LVA commander, Kapt. H. Walaardt Sacré, was engineers officer, and thus was in his element. Gradually the base was cleared from superfluous buildings, fences, flag poles, inventory etc. These were as much as possible used elsewhere in the army. Most existing buildings could be used: the hangars, assembly hall, fuel depot, hospital (Note 1), office building (became the staff building),

restaurant (for the time being used as quarters), etc. Only, the place had no electricity and no water. There was a not-too-reliable generator which was supposed to drive the water pump.

On 13 May, a Fokker aircraft arrived at Soesterberg from Germany - an M.1, flown by factory pilot Bernhard de Waal and mechanic Kuntner. When Soesterberg was informed of its approach, Lt. Versteegh took off with the Brik to meet them. They were warmly welcomed. They went on to Den Haag for demonstrations. On return, after takeoff from Soesterberg, they crash landed at Veenendaal and plane and crew went back to Germany by train.

In April 1913, steps were made to select aircraft. Kapt. Walaardt Sacré and Lt. F.A. van Heijst went to Paris, where they were joined by ir. John Rozendaal. They returned in May, and visited Heinrich van der Burg at Gilze-Rijen. They had selected the Farman HF.20 two-seater, of which three were ordered.

In the meantime, plans had been made for the organization and equipment of the LVA. It was decided to purchase in 1913-1916 four, six, eight, and ten aircraft respectively. The four available pilots in 1913 had to train to become instructors. From 1914 on, new pilots would be trained. In addition the infrastructure, ground organization, transport, etc. would be expanded.

The fourth plane of the 1913 purchase was Van Meel's singleseat "Brik", which received the serial LA1. In 1914, six HF.22 (including one for the Navy), and one Van Meel trainer were ordered. Delivery started in July 1914, but the war intervened and only four HF.22 arrived.

Kapt. Walaardt Sacré and his wife moved from Utrecht to Soesterberg in June. They moved into a "haunted house" near the field, until their new house on the base was ready. The couple had no children and Mrs. Walaardt Sacré was later to become a kind of mother for the pilots.

On 12 June 1913, Marinus van Meel (*28th Nov. 1880, †12th June 1958, French FAI license 511 on 6 June 1911) established his own aircraft factory at Soesterberg, NV Van Meel's Vliegtuigenfabriek. He worked with only 2-3 personnel. His "Brik" was used by the military pilots for training. On 11 July, his third aircraft, a Farman-type two-seater, the "Brik Twee" (Brik Two) made its first flight in presence of the C.LVA and some pilots. Van Meel made more flights and late in August he took part in the army exercises at Milligen. After having replaced the 50 hp rotary by an 80 hp, he made altitude flights on the 14th and 15th September to 1338 m and 1913 m respectively. Thereafter, he fitted a nacelle with which the

plane was flown in the autumn manoeuvres. Later in 1913, Van Meel went to Tiel on the river Waal where he fitted floats to his "Brik 2". He crashed with it in January 1914 during a demonstration for the Navy at Rotterdam.

In 1914 the LVA ordered a trainer from him. It was delivered in May: the Grote van Meel (Big van Meel), serialled LA5.

Van Meel realized he had to quit Soesterberg when the LVA needed the hangar he was renting. In February 1914, he started talks with the ENV at Gilze Rijen and soon took over the field. However, he had to remain at Soesterberg until he completed the trainer ordered by the LVA.

It was clear that he with his few men never could compete with other factories. This and the outbreak of the war meant the end of his factory.

Van Meel, who had been promoted to ensign, was called up for active service in August 1914, but did not make any flights, and soon returned to civil life as a businessman. He had tried to become an officer pilot, but being a reserve NCO he was not accepted. In addition, he was a mediocre pilot and being a life-long bachelor he did not have the serious attitude required for an officer. Van Meel still had his contract and in 1916 he was bought out with a hefty sum.

Early 1956, the KLu leadership realized that their first pilot had never received his Military Brevet, and they decided to do something about it. Thus, at the age of 75, on 6 March 1956, Van Meel received his MB along with four somewhat surprised sergeants.

On 1 July 1913, the LVA consisted of one C.O. (Walaardt Sacré), three pilots: Lts. F.A. van Heijst, W.C.J. Versteegh and L.F.E. Coblijn, and one SMA (sgt.major administration), J.J.W. Jansen. They were soon joined by Lt. L.J. Roeper Bosch, who had obtained his license at Gilze Rijen. The personnel soon increased a bit with the additions of sgt. C.J.A. Hoogeveen who had flown with kapt. Walaardt Sacré, B.J. Boevink (Note 2) a car mechanic and blacksmith who was brought in by Lt. Versteegh, and J. Verhagen, who already worked at Soesterberg.

Before coming to Soesterberg, Lt. Roeper Bosch with a Van der Burg "Monoplane type militaire" took part in military exercises from Gilze-Rijen on the 11th, 19th, and 26th of August. The LVA had no interest in Van der Burg's aircraft. There was only one single-seat biplane, Van Meel's Brik, which was initially hired and then bought on 6 September.

The first ground crew, all but one from the Engineers, arrived the 9th September from Utrecht: J.W. van der Drift (German license #456, 19 June 1913), E.L. van de Kragt, P. Lastdrager, J.W. van der Linden, A.H. Th. Preusser, F. Suurbier, and W. Warnaar. They were received by sgt. Hoogeveen who made it clear to infantry Corporal Van der Drift that this rank didn't mean much with the Engineers.

Except for Van der Drift, who joined Fokker in 1919, and Suurbier, these men still served with the Air Force in 1940 and Warnaar, Preusser, Verhagen en Van der Linden continued to serve with the Air Force after WW2. Warnaar had joined the army (engineers) in 1912 to become a pilot; he attained this goal in 1919. He was operational in May 1940. Van der Drift became a pilot in 1917, when other ranks were accepted. (Note 3) Finally, a corporal cook, H. Witteman, and a medic arrived. Later more men were posted.

The first week the men were busy with tidying up the camp. Occasionally they had a look into Van Meel's hangar. In the meantime, Lts. Versteegh, Van Heijst, and Coblijn and mechanic Boevink travelled to Paris to accept the three Farman HF.20. The contract is now lost, thus it is not known if any spares parts or spare engines were on order.

The autumn 1913 army maneuvers

From the 20th to the 24th September, the army autumn maneuvers were held, generally in an area east of Apeldoorn. Four aircraft, three of these private, were employed:

- The Brik, with Lt. van Heijst - the only LVA aircraft.
- The Brik Two, with owner res. ensign M. van Meel,
- Blériot, with owner res. ensign K.H. Bakker. He flew without an observer.
- Farman HF.20, with owner res. Lt. L.G. van Steijn.

The observers were: Lt. Versteegh, Lt. M.L.J. Hofstee, and capt. Walaardt Sacré.

On 17 September, Van Meel's and Bakker's aircraft were inspected and approved by a committee consisting of aviation engineer J. Schiere, L.G. van Steijn, and H.J.W.C. van der Burg. The C.LVA received a report.

A base with hangar tents was established at army camp Milligen. Lt. van Steijn remained at Soesterberg. During the maneuvers, 18 flights were made, including 8 "operational". Van Meel had to make a forced landing on the 22nd. Kpl. Preusser (the tallest LVA soldier) went by bike to assist him. On the way in the dark he heard strange noises and felt something brush against his leg. He was surrounded by wild boar and pedaled as fast as he could to get rid of them. Van Meel and Preusser spent the night at a nearby farm.

The C.LVA reported:

- The pilots did as good as possible.
- Van Steijn had the most suitable aircraft.
- Bakker had the least suitable aircraft.
- Van Heijst with a single-seater was as good as the others.
- One car per aircraft is ESSENTIAL.

After the maneuvers, Leo van Steijn established two altitude records. On 26 September, 2880m, and on 24 October, 2300m with a passenger (Lt. Hofstee). On 8 November he returned to Etampes in France.

During the maneuvers, the three previously-ordered HF.20 arrived. They received serials LA2, LA3 and LA4 (The “Brik” was LA1) and were test flown by Lt. van Heijst on 3, 4, and 8 October. They were allotted respectively to the lts. van Heijst, Versteegh, and Coblijn. Their mechanics were Van der Drift/Warnaar, Boevink, and Verhagen respectively. The pilots started training, and were joined by Lt. Roeper Bosch, who started flying the “Brik” on 13 October. The LVA now had 4 aircraft: 3 Farmans and the “Brik”.

On 14 October, HM Queen Wilhelmina visited Soesterberg and the Farmans were demonstrated. She was “most satisfied”.

After this, a lot of flights were made including many cross-country flights that were reported in the press. As the Farmans were personally allotted, the pilots were grounded if their plane was undergoing repairs; or they could use the “Brik”. There were periods during which all the Farmans were grounded. Initially there were some small technical problems (broken bolts e.g.) which were solved with help of the Farman’s mechanics.

During this time, in-flight problems were encountered; e.g. frozen carburetors, that resulted in emergency landings. Soon it became clear that the LVA needed trucks and trailers to recover stranded aircraft. These were ordered from the Trompenburg car factory in Amsterdam, where the then-famous Spijker cars were made.

Initially relatives of the pilots often visited Soesterberg and could have a ride. Several photos were made on these occasions and one of these proves that the LA2 (Van Heijst) carried orange roundels as early as 13 December 1913. Also, LA3 carried roundels.

The requirements for the Militair Brevet (military license) had been laid down. Lts. Van Heijst and Versteegh qualified respectively on 21 October and 23 November 1913. This involved, e.g. some long distance flights, which were mentioned in the newspapers. Lts. Coblijn and Roeper Bosch received their Militair Brevet in 1915.

For 1913 the known flying hours are:

Van Heijst	88 flights	39.32	21	cross-country
Versteegh	79		56.39	
25				
Coblijn	11		2.50	
local				
Roeper Bosch	30	6.00		with the “Brik”

We can assume that the pilots only flew their “own” Farman.

The spring 1914 army maneuvers

In March 1914, the LVA started exercises with the army. Of the army officers that came along as observer, some later joined the LVA as pilot or were posted for

observer training. An important task was artillery spotting, which was done at the Oldebroek artillery range. At the Oldebroek army camp (LbO = Legerplaats bij Oldebroek), an airstrip was built and a tent erected. For communications, a German Donath signaling lamp was used. Also messages were dropped from the planes. The Donath lamp was ideal (distance up to 8 km), but the Dutch industry was unable to produce the special bulbs that were needed. (Note 4)

The procurement of 6 aircraft was planned for 1914. These became five Farman HF.22 and one Van Meel. A total of six HF.22’s were ordered - one for the Navy. Two (including the one for the Navy) were intended as trainer and ordered with a 60hp Gnome rotary. The others had 80hp engines. Also spares were ordered. Whether spare engines were ordered is not clear.

Netherlands East Indies aviation

In 1913, the Navy had decided to buy an aircraft in 1914, post personnel with the LVA, and have a hangar built at Soesterberg. The Netherlands East Indies Army also had decided to start an aviation branch.

In 1914, when the OIL (Oost Indisch Leger/East Indies Army) decided to order aircraft for service in the East Indies, he requested the advise of Lt. H. ter Poorten. Lt. Poorten had obtained his license on 30 August 1911 (Be #48) at Brouckère’s flying school at Genck, Belgium. As a result of his advise, de Brouckère received an order for one Deperdussin monoplane and two Brouckère pusher biplanes.

The Deperdussin arrived in Java on 24 March 1913, but the army command was not at all interested in aviation and the plane was returned to Belgium. Around this time, two other OIL officers, Lt. G.D. Spandaw and capt. F. Darlang, were in training with De Brouckère.

The Brouckère biplanes had to be modified so much that de Brouckère suggested that two new aircraft should be built. Res. LTZ (Note 5) H.G. (Henri) van Steijn supervised the work in Belgium. The first plane, a trainer Model F, was sent by train to Amsterdam on 29 July 1914. The second, a recce type Model G, was about to be delivered when the WW1 started. On 2 August, Van Steijn got wind that the plane was about to be confiscated by Belgium authorities. He managed to take off just before policemen arrived, and after passing the night at ’s-Hertogenbosch, landed at Soesterberg on 3 August.

The Deperdussin had been flown by Lt. Spandaw to Soesterberg on 19 May 1914 for an overhaul. On 27 June, Lt. Spandaw was back at Genck, when he hired a Deperdussin Monococque to fly to Soesterberg to pass his MB tests. On 2 July, 1914, while taking off from Soesterberg for Genck in the Monococque, Lt. Spandaw crashed. He died the next day. The Deperdussin was considered useless by the LVA and scrapped.

At that time, the first aid provisions at Soesterberg were extended and it was stipulated that the whereabouts of a local doctor at Zeist, S.G.T. Bendien, should always be known. Dr. Bendien thus became the LVA only doctor until well after the war, as no army doctors volunteered for the job.

In the meantime, kapt. Darlang was severely injured in a crash, but later continued his training at Soesterberg. His wounds were ultimately fatal, causing his death in NEI in 1917.

It had been planned to ship the Brouckère aircraft to NEI in September of 1914, but the outbreak of war kept them in Holland where they served with the LVA.

In summer 1914, another plane came available for the OIL. Leo van Steijn had committed suicide at Etampes on 20 March, and his brother Henri inherited his HF.20, which was under repair with Farman. Henri didn't want to fly the plane and donated it to the OIL. With the outbreak of war this HF.20 was considered as "lost", until late in 1914 when Farman asked what to do with the aircraft. Its transport to Holland was quickly arranged, and in March 1915 the HF.20 arrived at Soesterberg. Thus a trainer was available for the OIL pilots.

The early military pilots not only had accidents with aircraft, but also with their cars. Lts. W.C.J.V. and L.F.E.C. (Note 6) both appeared before a military court and later the high military court. The former was sentenced to 5 days or f 25 but the latter, who had a serious accident causing serious injuries was jailed for 4 weeks in November 1914.

New aircraft and personnel

During July, pupil pilots arrived at Soesterberg: 1st Lts. A.N.S.W.L. Coblijn and A.K. Steup, and 2nd Lts. G.A. Koppen and M.L.J. Hofstee. On 1 August, LTZ A.S. Thomson arrived, and on the 7th res. 2nd Lt. P.M. van Wulfften Palthe, who already had a certificate, arrived. In addition, Ir. H.A. Vreeburg, also a pilot, was engaged to lead the Technische Dienst (TD, Technical Service). Lt. Steup had made a flight with Lt. Versteegh on 28 March.

The hussar, Lt. A. Coblijn, the older brother of Lt. L.F.E. Coblijn, was a high-ranking horseman. He had taken part in a contest in New York late 1912 and with two colleagues won the "America Cup". As a hussar, he was quite aloof and once a company commander. He introduced cavalry commands, much to the chagrin of the other ranks who were from the engineers and infantry. Cavalry personnel in the LVA also behaved aloof to the others, which occasionally caused tension among the LVA's other ranks. In these days, the hussars were the upper class in the army, and they behaved accordingly. Mounted artillery was next, then came the Artillery, which also had horses, and far below were the infantry and engineers.

As a contrast, infantry Lt. L. Coblijn got on well with his subordinates, e.g. his chief mechanic Warnaar. Lt. Koppen

who arrived in a shabby raincoat, was very interested in technique and never afraid to have greasy hands.

In mid-July, delivery of the six HF.22 started. On the 17th, the C.LVA and Lt. Versteegh went to Etampes to accept the two trainers. These arrived in Holland on the 28th: LA6 for the LVA and M1 for the Navy. Two more were on their way when the war started. Ir. Vreeburg and Henri Wijnmalen were appointed to collect these in Belgium, and with much trouble and efforts they got them to Holland. The last two were never delivered. Also spares were received, but nothing is known about spare engines.

Henri Wijnmalen obtained French license 208 on 29 August 1910. On 1 October, he set a world altitude record of 2780m. On 16-17 October, he made the flight Paris-Brussels-Paris in 28 hrs and 26 minutes, well within the 36 hrs required.

After working with the Maatschappij voor Luchtvaart, Henri Wijnmalen joined Dr. Ing. Max Oertz' factory in Germany as a test pilot. Oertz stopped aircraft production in late 1913, and Wijnmalen returned to Holland.

Wijnmalen had obtained a license from Farman. He planned to build a factory near Soesterberg and in March 1914 started a workshop in empty aircraft crates. The war spoiled this effort, and Wijnmalen moved to the Trompenburg car factory in Amsterdam.

Outbreak of war

The Dutch government reacted quickly to the threatening situation in Europe late July 1914. On 30 July, the border troops and coastal defense were mobilized. On 1 August, a general mobilization was called and the 3rd Field Army was in position. This quick action was possible because of the extensive preparations made by the General Staff, led by Lt.gen. C.J. Snijders. Later in August, CGS Lt.gen. Snijders was appointed Commander in Chief (OLZ, Opperbevelhebber van Land- en Zeemacht, Commander of Army and Navy) and promoted to full General. The LVA had been under his direct command as CGS and remained so once he was OLZ. Gen. Snijders (engineers) was an aviation enthusiast and got on well with the C.LVA, who had had him as a teacher at the Military Academy.

Germany had a plan for a war with France and Russia drawn up by CGS Von Schlieffen. This plan was known in Holland. The idea was to deal first with France and then with Russia. This envisaged a massive advance through the Dutch southern provinces, Belgium, and Luxemburg. However, the Dutch government did not know that Holland had been struck from the Schlieffen Plan in 1908, and the mobile Field Army (Veldleger) was deployed in the appropriate positions. The German GS in 1908 considered that involving Holland in a war had many disadvantages. Thus the German advanced through Belgium avoiding Dutch territory.

The war started with several war declarations and to each the Dutch government reacted with a neutrality proclamation. The Field Army on the southern border followed the moving front line in Belgium until it reached the sea.

Once the war had started, more pilots joined the LVA: Van Meel, Bakker, Lt. J. Labouchère, and Res. LTZ H.G. van Steijn. During August, the LVA had 12 aircraft available: Van Meel “Brik” LA1, the “Big Van Meel” LA5, 3 Farman HF.20 (LA2/4), 4 HF.22 (LA6/8 and M1), 2

Brouckère (K1/2) and one V&L monoplane (LA9) for taxiing training.

Van Meel and Bakker were not required for flying services. Being NCO’s, they had no chance to become officer pilots. As pilots they were not very good, and in addition Bakker lacked sufficient education. They soon left the LVA.

Frits Gerdessen (SAFCH #12), Netherlands.

Documents and Sources

The C.LVA reported to the CGS and during the war to the OLZ. We may assume that from the beginning a technical record was kept in which aircraft, motors, and flying hours were registered. Sadly, hardly any documents are left from the early years of the LVA. Those from the later years are more available. Also available are the agenda and correspondence registers. In these a very brief summary of a document (letter) is given. From mid-1916 the Order books are

retained, which contain useful information. Very important is the personal diary kept by the C.LVA over his whole period of command.

In 1915 the C.LVA was ordered to write monthly reports to the OLZ, in which he mentions the separate reports about flying hours, fuel and oil consumption, personnel, aircraft etc. Only the monthly reports still exist.

Pilots and observers no doubt made notes of their flights, but none are known.

Real logbooks must have been introduced during the war. Anyway they were in use by 1919.

Important are the private notes of Willem Warnaar.

Newspapers and (illustrated) magazines paid much attention to aviation, and thus lots of accidents and other incidents and developments can be found, esp. now many newspapers have been digitalized.

Early LVA Pilots

K.H. Bakker, 15.02.78/13.03.33. NL #2 07.04.11.
H.C.J.W. van der Burg, 29.04.82/20.01.55, NL #6 23.12.11.
L.F.E. Coblijn, 20.03.85/14.03.45, Fr. #735, 06.02.12. (Note 7)
F. Darlang, 1872/21.04.17, Be license 15.06.14.
J.W. van der Drift, 20.09.92/27.10.82, Du #456 19.06.13.
F.A. van Heijst, 28.08.83/11.09.75, NL #7, 31.12.11.
J. Labouchère, 04.03.84/1966, Fr. #344, 23.12.10.
M. van Meel, 28.11.80/12.06.58. Fr #511, 06.06.11.
H. ter Poorten, 21.11.87/15.01.68. Be #48, 30.08.11.

L.J. Roeper Bosch, 04.05.88/18.11.34. NL #9 21.05.13.
G.D. Spandaw, 27.10.79/03.07.14, Be #88 26.09.13.
L.G. van Steijn, 01.06.84/20.03.14 (suicide), Fr #1268 28.03.13.
H.G. van Steijn, 15.08.81/05.06.16 (suicide), Fr #1140 16.11.12
W.C.J. Versteegh, 19.05.86/06.01.75, Oe #40 02.11.11.
ir. H.A. Vreeburg, 16.04.89/01.09.73, Fr #1315 02.05.13.
P.M. van Wulfften Palthe, 09.04.91/23.04.76, Fr #1617 27.03.14.
H.J.E.W.C. Wijnmalen, 03.09.89/01.02.64, Fr #208, 29.08.10.

Notes

1. The hospital building still exists and has been returned to its original condition.
2. Sgt. Boevink became the most important mechanic in the LVA. In 1940 he was an W/O in head of the assembly shop. He wanted flight training to better judge his work, but the C.LVA refused, being afraid to lose his master mechanic in a crash.
3. Van der Drift later became a car dealer, and was a sports pilot after WW2.
4. During WW1 before the introduction of wireless, the LVA used signal sheets on the ground and roetapparaat signals from the aircraft. The

“roetapparaat” used black powder. (roet = soot) The powder had to be absolutely dry or it would clump due to moisture in the air, thus the system was not fully reliable. Experiments were carried out with different materials, e.g. coal dust and charcoal. But when the wireless came in use the roetapparaat was retained as a badly needed reserve. There are no technical details known and the only clear photo shows the apparatus on the underside of a Farman. It appears to have been a container with a propeller-driven compressor in front, an exhaust at the rear, and a power container on

the side. The observer could open a valve to make Morse-code signals. A photo exists of Lt. Koppen and an observer with black faces and clothes. That can never have happened in the air. They must have been tinkering with it after landing.

5. LTZ = Luitenant ter zee = naval lieutenant.
6. The newspapers usually gave only initials.
7. The Paris-born Lt. Coblijn resigned after WW1 and returned to France. In WW2 he apparently was involved in the French Résistance and was arrested in 1944, ending up in the Dachau concentration camp.



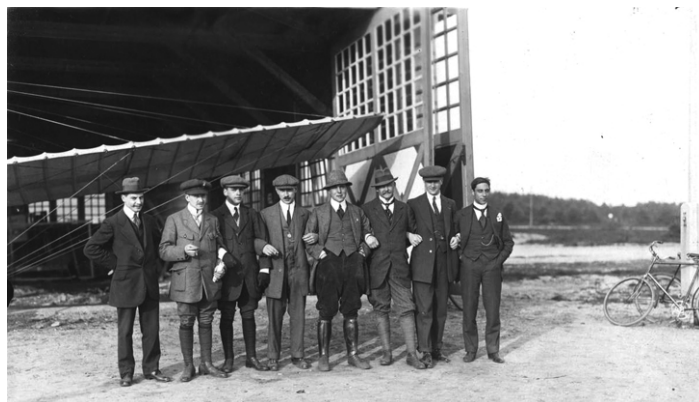
1. Lt. Gen. C.J. Snijders. He has 4 silver stars. A generaal-majoor had 2 silver and 2 gold stars. (geniemuseum)



2. Kapt. H. Walaardt Sacré in his car.



3. Bernhard de Waal (back seat) and mechanic Kuntner arrived at Soesterberg 13 May 1913.



4. After Bernhard de Waal and Kuntner arrived at Soesterberg with their Fokker M.1 this photo was made. LtoR: Lt. L.J. Roeper Bosch Kuntner; Lt. L.F.E. Coblijn; Heinrich van der Burg; Bernhard de Waal; Jhr. Ram (Aero Club) jonkheer = squire; Marinus van Meel; Lt. W.C.J. Versteegh



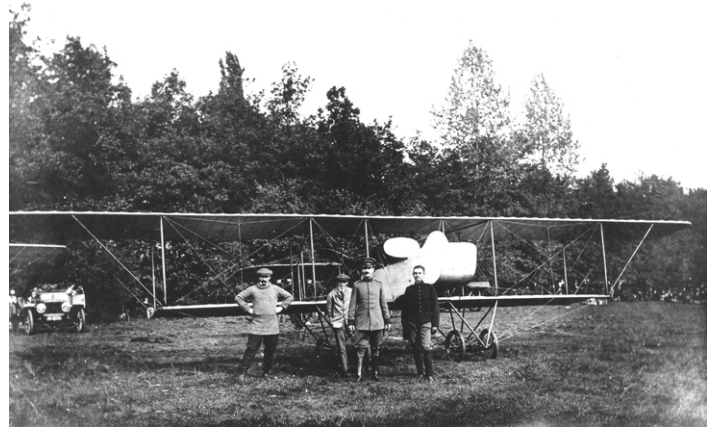
5. Lt. W.C.J. Versteegh in the "Brik".



6. Van Meel taking off in his second "Brik" from Soesterberg to join army manoeuvres on 20 August 1913. The nacelle has not yet been installed.



7. Van Meel's "Tweede Brik" in September 1913, with nacelle. On the plane are Van Meel (left) and Lt. M.L.J. Hofstee. In front are Lt. van Heijst and sgt. Henri Bakker.



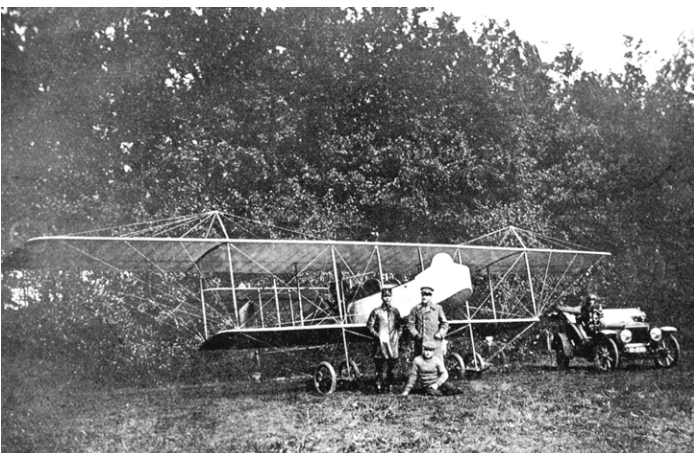
10. The "Brik 2" at Milligen 22-25 Sept. 1913. On the Left is M. van Meel and at right his observer Lt. M.L.J. Hofstee.



8. The 6th March 1956 Marinus van Meel received his Military Brevet, along with 4 sergeants, among them Aart van Wijk (3rd from left). (Photo: Aart van Wijk) Note: Aart van Wijk became a Gloster Meteor pilot and later KLM captain.



11. Officers and soldiers of the 3rd Pioneer Company. Top row at left Willem Warnaar, who was posted to the LVA on 9 September 1913; below at left Lt. H.L. van Roijen, 2nd in command (and balloon pilot). The soldiers changed uniforms with their officers. With the engineers the relations were (and are) less strict than elsewhere in the army.



9. Leo van Steijn's Farman F.20 at Milligen, 22-25 Sept. 1913.



12. Leo van Steijn with a Farman.



13. H.M. Queen Wilhelmina (2nd from right) has a look at the Brik on 14h October 1913. At the right is C.LVA capt. H. Walaardt Sacré.



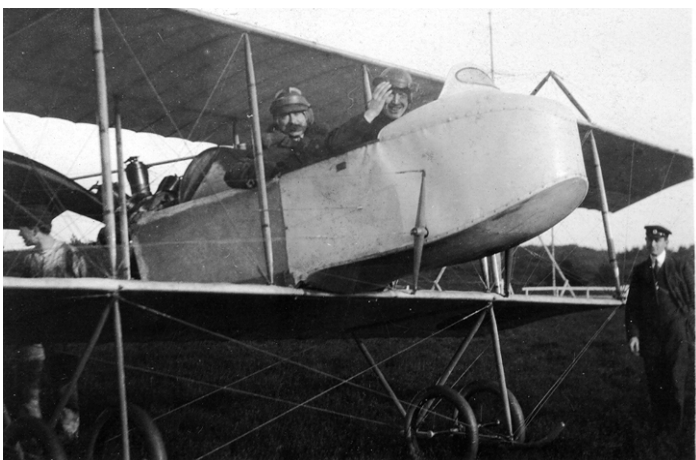
16. LA2 with Lts. van Heijst and Coblijn at Deventer, 17 Febr. 1914.



14. Lt. van Heijst in LA2 about to take off for his MB flight.



17. On 25 February 1914, Lt. van Heijst made another cross-country flight in the LA2 with Lt. Coblijn as passenger. It was cold - the carburetor started to freeze and the crew became hungry. They landed at Zutphen, where this photo was taken; had dinner in the Grand Hotel du Soleil, refueled, and returned to Soesterberg. At the left is Lt. van Heijst, and at the right Lt. Coblijn.



15. 13 December 1913. Lt. van Heijst about to take off in LA2 with his guest Mr. Korthals Altes. The orange roundel is just visible. This is the oldest known photo with this marking.



18. Lt. Versteegh with a passenger in LA3 - with roundels.



19. Lt. Versteegh (on the nacelle) with some guests around LA3.



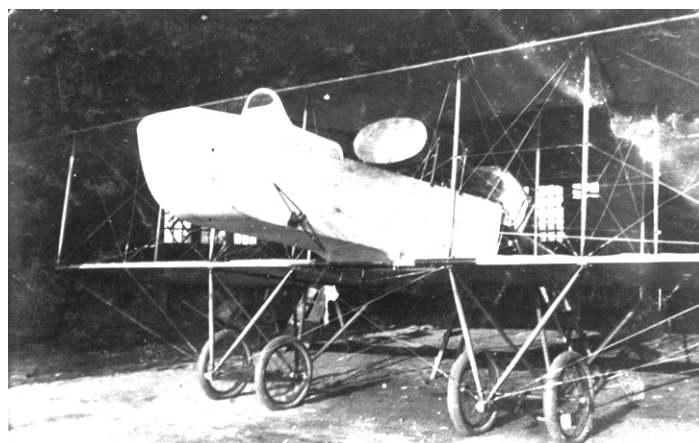
20. Lt. Coblign's Farman LA4 in front of Hangar #4 in April 1914.



21. Lt. Coblign in his LA4 (without roundels) in April 1914. At the right is mechanic J. Verhagen. The serial is just visible on the rudder.



22. Lt. Coblign and his mechanic J. Verhagen (still a civilian) with LA4.



23. The only known photo of the "Grote Van Meel" (Big Van Meel) LA5.



24. Lts Versteegh (pilot) and Roeper Bosch visited Spaarndam on 4 June 1914 with LA3. They had engine trouble in take-off and somersaulted on landing. The crew was unhurt. The plane was later rebuilt.

See more photos on page 38.

Canadian Navy HUP Helicopters

Patrick Martin

[Editor's Note: The following article is a reprint of one section from the book "Royal Canadian Navy, Aircraft Finish and Markings, 1944-1968" by Patrick Martin (SAFCH #531). See book review at the end of this article. It is reprinted with the permission of the author.]

The Piasecki Helicopter Corporation of Norton, Pennsylvania, USA, designed the small tandem-rotor Model PV-18, to meet a USN requirement for a utility helicopter. With an eye to plane guard duties aboard aircraft carriers, the USN evaluated two prototypes, designated XHJP-1. These were followed by 32 production HUP-1 during 1950 to 1952. Refinements were added as the design evolved. The little helicopter could carry four or five passengers in addition to the crew of two. Both of the three-blade rotors could be folded for storage aboard carriers.

The HUP-2 followed with a increased power delivered by a Continental R-975-46 engine (as used in Sherman M4 series of tanks). An unusual feature of the HUP was a large starboard offset rectangular hatch in the forward floor. An interior winch could lift (181 kg) through the hatch. Piasecki would build 339 HUP-2, of which 19 were provided to the Aeronavale of France. Some of the helicopters

delivered to the USN were designated HUP-2S, reflecting early submarine detection dunking sonar equipment.

The US Army joined the program in 1951 with an order for 70 HUP-2, designated H-25A Army Mule. This model featured a reinforced floor and hydraulically boosted controls. The USN later accepted fifty ex-Army examples giving them new USN serials, as the HUP-3. Under the revised US common service aircraft designation system, the remaining HUP-2 and HUP-3 helicopters were re-designated as UH-25B and UH-25C in 1962.

The HUP was of metal construction with fabric-covered rear half of the pylon and wooden rotor blades. The HUP-3/H-25A fuselage measured 31 feet ten inches (9.70 m) in length, twelve feet eleven inches in width with blades folded and a height of twelve feet six inches (3.81 m). Each rotor diameter was 35 feet (10.67 m). Empty weight was 3,928 lb (1,781 kg) while the maximum weight was 6,125 lb (2,778 kg). A maximum speed of 115 mph (185 kph) was achievable though 92 mph (148 kph) was standard cruise. The service ceiling was noted as 12,700 ft (3,871 m) and range was 355 miles (571 km). The HUP could sling 1,000 pounds of cargo.

Production

The HUP/H-25 production ran between February 1949 and July 1954, with 338 helicopters built. HUP/H-25 production consisted of:

XHJP-1 37976 - 37977	(2)	126706 - 126715 HUP- 2	(10)	130016 - 130070 130071 - 130085	(55) (15) France	H-25A 51-16572 - 16641* (70)
HUP-1 124588 - 124594		128479 - 128600 129418 - 129522	(122) cancelled (34) (4)	130086 - 130100 134434 - 134437	cancelled (4) cancelled	HUP-3 (not new - ex-H- 25A) 147582 - 147630 (49)
124915 - 124929	(7) (15)	129978 - 130011 130012 - 130015	France	134677 - 134691 135718 - 135745	cancelled	149088 (1)

*Aircraft from within this batch taken into RCN inventory

US Army & Navy Service

The HUP will be best remembered for the carrier plane guard role with the USN. The US Army used the Mule in the Korean conflict in the roles of liaison, rescue and as a light transport. The H-25A proved unsuited for the US Army and was supplemented by the larger Sikorsky S-55 design. In 1955, the US Army downsized its use of the H-25A program, passing fifty examples to the USN as HUP-3. The few remaining Army examples were withdrawn from Army service by 1958 and from the USN in 1964.

RCN Service

Three Piasecki-built helicopters were diverted new from the U.S. Army order for use with the RCN and delivered to Dartmouth on May 11, 1954. By virtue of their U.S. Army origin, including construction number and livery, the three were H-25A helicopters. The USN designation for the similar, but earlier naval version was HUP-2. When the U.S. Army handed over 50 of 70 helicopters to the USN in 1955, the designation HUP-3 was used. The term HUP was used within the RCN.

VH 21 took the three HUP helicopters on strength. They were purchased to supplement the Bell HTL-4, mainly aboard the Arctic Patrol Vessel *MCS Labrador* and general utility duties from Shearwater. In April 1955, VH 21 was re-designated to HU 21 reflecting the increased utility role. A single HUP was taken aboard *HMCS Labrador*, along with a pair of HTL-4/6 for arctic cruises in 1955 through 1957. Flying was carried out in support of the DEW Line construction, expanding survey efforts, hydrographic work and the installation of navigational beacons. Outside Canadian waters, the HUP was aboard *HMCS Labrador* for only two non-arctic cruises, the January 1957 voyage to Montego Bay, Jamaica and a European cruise during March and April 1957.

Two of the three helicopters were transferred to Patricia Bay based VU 33 on the West Coast in 1958, performing the same shore based roles, including search and rescue. The third example followed in March 1960. All three remained with VU 33 until struck off strength on February 28, 1964.

Finish and Markings

All three HUP-3 were delivered to Shearwater in the standard, for the period, U.S. Army Gloss Green (FS 595 14087) and Yellow markings of the U.S. Army, as they had come from within the 70 examples ordered as HU-25A. All three were soon repainted in the Dark Grey/Light Grey finish of the RCN. A 36-inch Red Day-Glo band was applied aft of the cockpit glass works on the forward fuselage and on the upper rear rotor pylon. In mid-1955 a new 18-inch high-visibility colour was experimented with called Vulcano Red, also known as 'Ultra-Lite', daylight fluorescent lacquer. A lack of dated colour photos makes the continued use of this colour unconfirmed, with only one example photographed with the narrower band. When repainted a small light Grey stripe was noted above the frontal glass works.

NAVY+3 Era

The HUP went through no less than four sets of numbers in the NAVY+3 Era. As originally painted for VH 21, 945-947 range numbers were used in a non-curved format. All three helicopters changed numbers to 245-247 range numbers on June 1, 1955, with the same non-curves font. Prior to 1958-60, the number was changed again, this time to 405-407 ranges (to follow the co-based VU 33 *Avenger*), in a

really odd very unprofessional looking font (inconsistent stroke size etc.) Yet another change was made around 1958, to the 921-923 range of numbers. By this time, all three helicopters were with VU 33 at Patricia Bay.

The markings of the HUP followed the standard RCN convention for aircraft fuselage markings, the only helicopter to do so. The three HUP helicopters were assigned the numbers '945', '946' and '947'. The fuselage markings string consisted of, reading left to right, 18-inch 'NAVY' title, 24-inch Type 1 roundel and the three-digit individual assigned HUP number also in 18-inch format. The same roundel was also applied to the upper and lower fuselage. The rear fuselage title block was a stencil applied, three-tiered 'ROYAL CANADIAN', 'NAVY' and the former US Army/USAF serial, maintained by the RCN, was centred in the Black four-inch format. The serials were shortened to the last six-digits and dropping the hyphen (51-16621 to '11662'). The tail applied 12 by 18-inch high fin flash was aligned with the major panel line running up and slightly forward. This line appeared almost vertical when a HUP rested on wheels.

Artwork called the 'Buzz Bear' was painted on HUP 246 and 247, when both were aboard *HMCS Labrador* in 1957. A second variety followed.

NAVY+L-3 Era

During or post-1960, the last number change was made when adopting the NAVY+L-3 Era markings utilizing the last-three digits of the serials, 621-623. The HUP continued in the standard finish of Dark Grey/Light Grey finish with high-visibility markings during the NAVY+L-3 Era. Both '621' and '623' used a rather odd curved font. HUP '622' maintained the older no-curves font but added an odd sized and vertically distorted White Ensign in place of the fin-flash. HUP '623' was in variance with the other two helicopters by not having a Light Grey strip above the upper front cockpit glass, until repainted as '623' in the standard font used by other types during the NAVY+3 and NAVY+L-3 eras.

Individual Aircraft Histories

The original U.S. Army/USAF serial were maintained during RCN use. There are at least two HUP-3/HU-25 helicopters masquerading as RCN HUP-3. One owned by the Aero Space Museum in Calgary was acquired by trading a very rare genuine

ex-RCAF Sikorsky H-5. The second was an ex-USN HUP wreck received by Langley Museum of Flight, which was traded off to the Shearwater Aviation Museum in exchange for a Voodoo (the Langley Museum of Flight already had a Voodoo and sold it for scrap) in a deal that was vetoed by DND after the HUP went east.

51-16621 Arrived Shearwater and taken on strength May 11, 1954; assigned to VH 21 and numbered '945'; '245' during 1955; transferred to VU 33 at Patricia Bay by rail, arriving on July 10, 1958, as '245'; with VU 33, numbered '405' and '921' were used before '621', the last-three of the serial was applied; struck off strength on January 18, 1964. Following many years of use at the B. C. Institute of Technology (aviation trade school) as C-BVSD (fictional registration) was donated, following superb restoration to flying condition (briefly and secretly lifted once), to the Canadian Museum of Flight and Transportation in 1982. After many years sitting outside, it was very unwisely sold in a deal for a ex-USN HUP-3 wreck and cash in 2000, current with Classic Rotors, Ramona, CA.

51-16622 Arrived Shearwater and taken on strength May 11, 1954; assigned to VH 21 as '946'; to '246' during 1955; taken into the arctic aboard USCG USS *Eastwind* to replaced another

unserviceable HUP; joining *HMCS Labrador* on August 5, 1957; returning to Shearwater on October 11, 1957; transferred to VU 33 at Patricia Bay as '246' arriving on March 21, 1960; with VU 33 as '406' and '922' before using '622', the last-three of the serial; struck off strength on December 4, 1963. Sold in the USA and registered as N6699D as an instructional airframe; purchased and restored by Boeing (Canada) donated and current with British Rotorcraft Museum, Weston-Super-Mare, UK.

51-16623 Arrived Shearwater and taken on strength May 11, 1954; assigned to VH 21 and numbered '947'; renumbered to '247' during June 1955; was aboard *HMCS Labrador* for the 1955 Arctic cruise; overhaul at Boeing Canada at Arnprior between April 28 to November 5, 1958; renumbered '407' and transferred to VU 33 at Patricia Bay by rail, later numbered '923'; before the last-three of serial '623' was applied; last flew with the RCN on February 28, 1964; thought struck off strength on January 18, 1964. Purchased by the Canadian War Museum on February 24, 1965; restored by Boeing Canada at Arnprior between May 1981 and November 1982, current with Canada Aviation Museum, Rockcliffe.

Patrick Martin (SAFCH #531) Canada.

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Royal Canadian Navy, Aircraft Finish and Markings, 1944-1968 is designed as the definitive Royal Canadian Navy aircraft finish and markings book. This volume tells the story in text, photos and drawings of the Canadian Naval Air Arm, from the manning of two Royal Navy escort carriers starting in late 1943 in Vancouver, until the demise of the Royal Canadian Navy in 1968. All aircraft types used are covered with text that covers history, production, Canadian use and all known schemes.

Aircraft types include: Avro Anson Mk.V; Grumman Avenger TBM-3E, AS 3 Mk 1, AS 3 Mk.1/ECM, AS 3 Mk 2, AS 3M, AS 3M2, TBM-3W2 and Target Tug; McDonnell Banshee; Barracuda Mk.II and Mk.III; Beechcraft Expeditor;

Fairey Firefly FR.I, T.I, T.2, FR.IV and AS.5; North American Harvard; Sikorsky HO4S; Bell HTL-4/6; Piasecki HUP; Hawker Sea Fury F.10 and FB.11; Sikorsky Sea King; Supermarine Seafire Mk.III and Mk.XV; Canadair Silver Star; Fairey Swordfish; Schweizer TG-3A; de Havilland Tiger Moth; Grumman Tracker S-2, CS2F-1, CS2F-2 and CS2F-3; Supermarine Walrus Mk.I and Mk.II, Grumman Wildcat Mk.V and Mk.VI; and sundry types: Sikorsky Hoverfly Mk.I, de Havilland Sea Hornet, Hawker Sea Hurricane, Fairey Gannet, Blackburn Shark, Fairey Albacore and Hawker Seahawk.

Also included is detail on the Air Groups, Schools, Flights and Squadrons of the RCN. The ship section has details of the Canadian involvement with and

histories of Fighter Catapult Ships, CAM-ships, MAC-ships, escort carriers *HMS Nabob* and *HMS Puncher*, the post-war light fleet carriers *HMCS Warrior*, *HMCS Magnificent* and *HMCS Bonaventure*, and all other RCN vessels and bases operated RCN aircraft.

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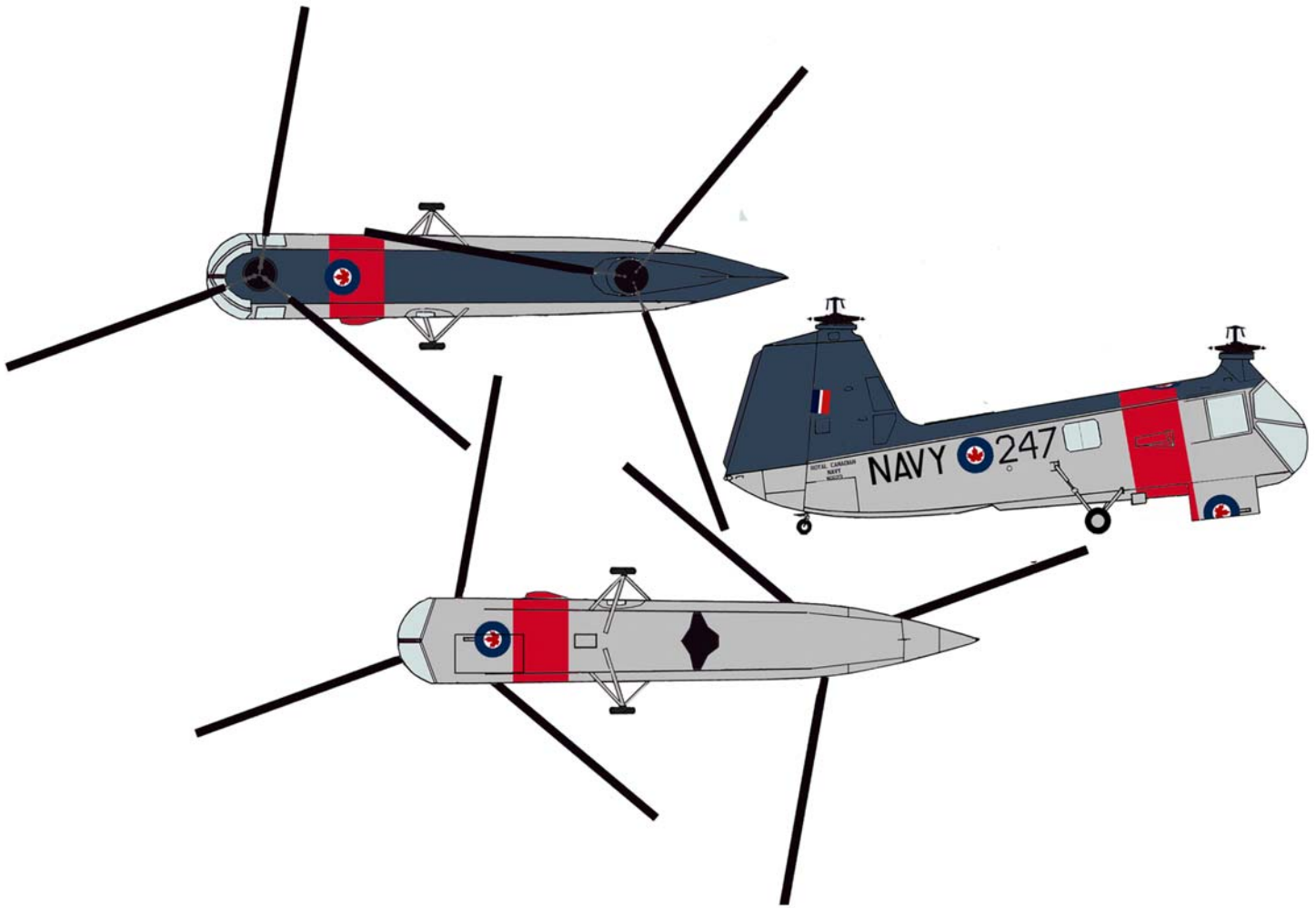
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The Korean People's Air Force

in the Fatherland Liberation War

Part 12: New Jets for the KPAF

Douglas C. Dildy

"...Aviation units are to forcefully complete their flight training and in three months be ready to participate in combat operations in squadron size formations, continue to conduct reconnaissance and maneuvering raids, and improve the tactics of the Air Forces..."

Kim Il-Sung, "On Strengthening Our Defensive Position"
30 December 1952

Reshaping the Communist Coalition's Air Defenses

The highly successful USAF/USN strike against the Supung hydroelectric plant on 23 June 1952 was a watershed event in the air war over North Korea. The loss of electrical power in all of North Korea, at Chinese heavy industries in Manchuria, and at the Soviet and UAA's facilities around Andong emphasized the Communist coalition's vulnerability to truly strategic American air strikes. To defend against any future disasters such as this, on 9 July a conference of the air force leaders of all three nations was convened at Andong.

The participants agreed to increase the numbers of MiG-15s defending the vital assets (Yalu bridges and Supung hydroelectric plant) by adding one Soviet, one North Korean and seven Chinese fighter divisions to the UAA order of battle, but operationally these reinforcements were constrained by the numbers and sizes of the jet-capable airfields bordering North Korea. Specifically, Supung would be defended by a PLAAF MiG-15 division at Dongfeng (15th FAD), three anti-aircraft artillery (AAA) regiments, a "scout aviation regiment" and a searchlight battalion. Operationally, it was decided that the UAA would "take the lead" organizing the air defense, with PLAAF units primarily responsible for engaging US/UN attack and bomber formations while the Soviet MiGs engaged the F-86s and were responsible for night and weather operations. The KPAF units would fly "free hunter" missions against "lone flight[s] of enemy aircraft" [one or two enemy aircraft constituting a single radar contact] so that the less experienced Korean pilots "would feel less threatened and hopefully secure an easy victory" and thus gain positive combat experiences.

The results of this conference – and the devastation of Pyongyang on 11-12 July which caused 6,000 civilian casualties – prompted a flurry of telegrams (15-18 July) between Kim Il-sung, Mao Zedong and Stalin in an urgent effort to prevent further catastrophes. To Stalin, Kim appealed for the provision of additional

light and medium AA guns to equip ten new AAA regiments, expanding the UAA's day fighter coverage south far enough to protect Pyongyang and increasing PLAAF and KPAF night fighter operations. Additionally, he called for the release of the 40 aircrews training on Tu-2s at Khorol', in the USSR's Primorye Province ("Maritime Territory") near Vladivostok, "so that they could immediately take part in active military operations and bring influence to bear on important military sites." (Note 1)

Kim urged Mao to have the Chinese-led UAA improve its control of fighter forces "so that it *correctly* [italics mine] directs the air battles over Korean territory", extend its fighter coverage southwards to defend Pyongyang, "and to strengthen by all measures the PVO [Russian acronym for "air defense"] of the capital and important industrial sites". Acknowledging US/UN daytime air supremacy, he added that "It is necessary to send already-trained air force bomber units on night action deep in enemy [territory, bombing] airfields, warehouses, barracks, and other military installations of the enemy."

Sensing weakening resolve by his Asian allies, Stalin hosted a conference in Moscow on 4 September, attended by Kim Il-Sung, Zhou Enlai and Peng Dehuai. In this meeting Stalin formally agreed to equip ten AAA regiments and promised Kim that the USSR would "provide the material [MiG-15bis fighters] for three air divisions." At the end of the meeting – which covered the thorny POW repatriation issue, layout of frontal ground defenses, fighter pilot proficiency, and a myriad of lesser military matters – Stalin promised "We intend to send one division of jet bombers each to Korea and China if, of course, you want this." In chorus, Zhou Enlai and Kim Il-Sung responded with "Of course we want this, Comrade Stalin."

Based on these agreements, for the KPAF 100 new MiG-15bis jet fighters were sent to Kungchuling, (now Gongzhuling), near Changchun, in PRC's Jilin Province. The first half of this consignment was

accepted by the 1st FAD, now commanded by Colonel Kim Hi-Kiung during October, the unit then returning to Anshan to train on the new, more powerful model. The 2nd FAD followed suit, the 56th GFAR turning in their tired La-9s, La-11s and Yak-9Ps (Note 2) to convert to the jet fighter. This new jet fighter unit was commanded by General Hu Min-Kuk, who had previously been the vice-commander of the KPAF's training establishment at Yanji.

To ease the transition, a number of MiG-15-experienced pilots from 1st FAD were transferred to Hu's unit, the most important being Colonel Tae Kuk-Sung, the former commander of the 2nd FAR, who became Hu's deputy. When Tae, having added two (fictitious) victories over F-86s to his previous score, (Note 3) became the vice-commander of the 2nd FAD, his position commanding the 2nd FAR was assumed by Major Chae San-Tae.

The 2nd FAR returned to Langtao in November and launched 56 sorties with their new MiGs. Lt No reported, "On our first combat mission in the new fighters we gained an altitude of 13,000 meters (43,000 feet) somewhat faster than in the older model. The advantage of a faster climb than the Sabre had been further improved. Over the Yalu River, we encountered F-86s scattered all over the so-called MiG Alley and we attacked each other at a relatively high altitude. Chinese and Russian MiGs were also involved, making the sky a confusion of airplanes. Each fighter seemed to shoot at anything that flew in front of it, at least if it seemed like a foe. My regiment became embroiled in several dogfights, and our grand formation was broken up, but I managed to remain part of a four-ship formation."

Miserable winter weather ensued, reducing flying operations the next two months, limiting the 2nd FAR to 24 sorties in December and only 12 in January. There are no reported engagements, victory claims or losses during this period.

By February the 2nd FAD completed training on the MiG-15bis at Anshan and rotated to Langtao to begin combat operations. (Note 4) To relieve the mounting congestion, the next month the 1st FAD deployed to Tonghau airfield, approximately 50 miles (80km) north of the Yalu and 100 miles (160km) northeast of the Suiho dam/Supung hydroelectric complex. Protecting this vital asset, the 2nd FAR – and specifically Chae – received credit for destroying "an F-94, apparently on a reconnaissance sortie." Four MiG-15s attacked the target (most likely an RF-80), which was last seen "to bank sharply to the left and into a spiralling dive to speed away."

The regiment's first big clash with Sabres was on 21 March – a clear, bright day – when 16 MiG-15bis launched from Tonghau to join a large air battle, involving two Soviet MiG regiments and two PLAAF air divisions against both USAF Sabre groups, that stretched as far south as Sariwon. Passing 11,000 meters (36,089 feet) as they approached the Yalu, Major Chae spotted numerous jet contrails ahead at a much higher altitude. Worried, Chae radioed the UAA/CP at Langtao where General Lee Whal was directing the KPAF portion of the air battle. Lee assumed the contrails were from Soviet or PLAAF jets launched earlier and called back, "Don't worry about them, and keep climbing."

According to Lt No, "We climbed higher and flew right into them. Hordes of F-86s jumped us at 13,000 meters (43,000 feet), coming from left and right and from ahead. I saw a dozen Sabres scattered around the sky and knew there were many more. Every MiG went its own way, trying to escape the fatal web woven by pairs of the American fighters."

No and his wingman escaped by continuing to climb straight ahead, the more powerful VK-1 turbojets powering their new fighters above – and out of reach of – two Sabres that pursued them, but one North Korean pilot – Lt Kim Lee-Joo – had his MiG riddled by Sabre machine guns, disabling the engine and severing the control lines. His ejection seat failed and Kim was forced to bale out manually, but he impacted the horizontal stabilizer and was probably knocked unconscious (if not killed outright) and never deployed his parachute.

It was indeed a large air battle, involving the Soviet 518th and 535th IAPs and the PLAAF's newly operational and woefully inexperienced 6th and 16th Air Divisions, battling against the USAF's veteran 4th and 51st FIWs. As one 4th FIW pilot reported, "We entered the combat area at a high rate of speed, with full internal tanks and plenty of altitude. There were already F-86s involved in numerous dogfights up ahead, and we were coming in to relieve the ones that were getting low on fuel. There were a lot of MiGs in the area and I could see several gaggles up ahead and below. It was very unusual to see them at a lower altitude, which meant we had a good height advantage for once. I peeled off and went screaming down after them, trying to pick a target out to go after, but there were so many jets in the air it was tough." (Note 5)

On this occasion, the Russians failed to protect the inexperienced PLAAF and KPAF MiGs, made no claims, and reported no losses. The Sabre pilots were

credited with eight victories while suffering two F-86Fs damaged. (Note 6) During March the UAA lost 13 Chinese and Korean MiG-15s, prompting General Nie Fegnzhi (UAA commander) to send two urgent messages to Mao, requesting the return of combat-experienced units.

The Return of the “Guards Taejon”

Together the KPAF MiG units flew 352 sorties in February and 376 in March, a dramatic increase in combat operations. While this is attributed largely to improved weather (at least in the Soviet history), it more probably reflects the fact that a second Korean fighter division was now participating, and one component of was the more aggressively-led 56th GFAR, commanded by Major Kim Di-San. (Note 7) An elite unit with a strong combat reputation to uphold, the “Guards Taejon” – now flying front-line jet fighters instead of second-hand WW2-era propeller airplanes – was anxious to live up to its honorific title and return to the pre-eminence, and glory, of being the KPAF’s premier fighter unit.

Capitalizing on his successful experience committing the 2nd FAR against USN Corsairs and Skyraiders, Colonel Tae urged his new command to avoid fighting Sabres in MiG Alley but sweep southwards along the coast looking for the far more vulnerable propeller-driven carrier aircraft. On 4 February six KPAF MiGs swept as far south as the Taedong River estuary and, apparently guided by radar controllers, intercepted a flight of four USN F4Us of VMA-312 (USS Bataan, CVL 29) near the small island of Sok-to (just east of Cho-do). The Corsair pilots dodged the Korean attacks, claiming to have damaged one MiG-15 before the attackers departed northwards. Two days later a pair of KPAF MiGs intercepted four British Fleet Air Arm (FAA) Hawker Sea Fury FB.11 fighter-bombers from HMS *Glory* (NAS 801) off the coast near Chinnampo and made one firing pass, returning to Langtao to claim one destroyed. (No damage was actually done.)

The “Guards Taejon” first clash with USAF F-86s occurred on 28 March when Captain Han Min-Kwan attempted to lead his squadron beyond “MiG Alley” to patrol near Sunchon at 12,000 meters (39,370 feet). The North Koreans engaged a formation of 4th FIW Sabres led by their wing commander, Colonel James K. Johnson. A swirling, high-altitude dogfight quickly developed with Han and element leader Lt Kim Hyon-Hak closing to attack the American flight leaders, but were quickly jumped by other F-86s. Kim’s wingman, Lt Ho Ki-Bok, “counter-attacked” against the pair of

Sabres pursuing his leader, reportedly shooting down one F-86, while Kim switched targets, attacking the F-86s chasing Han. In a swift, high-G climbing turn Kim rolled out behind and beneath one of the Sabres and opened fire, reportedly shooting it down. As the swirling dogfight continued, the Koreans claimed a third Sabre shot down, but lost one (pilot not named) MiG-15bis to Colonel Johnson.

Flying a new F-86F Johnson entered the fight from above, reporting that “I was leading my flight, patrolling the south side of the Yalu River at about 42,000 feet. Looking down and to the left [north-northwest] as we headed up the river, I spotted two MiGs below us headed south. I called [my wingman, 1Lt Robert Carter] and pointed out the MiGs. We dropped our tanks, and went into a dive coming up behind the apparently unwary MiGs. I closed on one of them, and opened fire at about 200 feet [61m]. I gave him two real good bursts. The first burst hit the left wing, and walked right up into the canopy. The second burst went right up his tailpipe. The MiG started shedding large pieces and started burning furiously. Suddenly the canopy came off and the pilot ejected. The plane headed down, disintegrating as it fell, and crashed just north of the Yalu River.” (Note 8)

Attempting to fulfil Kim Il-Sung’s directive of expanding the UAA’s air defense as far south as Pyongyang, the KPAF’s 1st and 2nd FADs flew 376 MiG-15bis sorties in March, reporting in the January-March period to have lost three of the new MiG-15bis, including one that mysteriously caught fire in flight (Captain Lee Yoon-Ha ejected safely).

Jet Bombers Join the KPAF

As Kim Il-Sung requested, the KPAF bomber division undergoing training at Khorol’, in the Soviet Primorye Province, graduated and was transferred to Kungchuling/Gongzhuling where it began receiving the Russians’ new, fast, twin-engine jet Ilyushin Il-28 light bomber. Fulfilling Stalin’s promise, approximately 100 Il-28s were delivered to northern China during November-December 1952. According to USAF SIGINT, “up to 45” of these went to the PLAAF, whose 8th BAD passed its Tu-2s to the PLA-Navy’s newly-established air arm (Note 9) and began training on the jet bomber in at Qiqihar (formerly Tsitsihar, approximately 160 miles/260km northwest of Harbin), in Heilongjiang Province. (Note 10)

Closer to the frontlines, in early December KPAF received 42 Il-28s at Kungchuling, joining the recently-trained bomber air division that arrived at this base in mid-November. Upon arrival the Tu-2 unit began

operational training and local familiarization flights, but these soon gave way to Il-28 transition training conducted by Soviet instructor pilots. Proficiency appears to have come quickly for, on 17 December, a pair of Il-28s were seen flying over the northwestern edge of Korea, along the Yalu River. Training progressed rapidly, including formation flying and cross-country navigation missions, a flight of 18 Il-28s being observed on 27 January, with as many as 28 flying cross-country sorties the next week. Three bombers may have been lost (or damaged and withdrawn for repairs) during training because on 12 March the unit reported 39 Ilyushin's on strength. (Note 11)

The KPAF bomber unit – or an independent reconnaissance or training unit – retained 15 propeller-driven Tu-2s as reconnaissance aircraft or for twin-engine transition and basic bomber procedures training (prior to transitioning to the jet-powered Il-28), or both. On 30 January 1953 one of these aircraft was detected by “Dutchboy”, the USAF's 608th AC&WS radar and air direction center on Cho-do Island, apparently headed towards the island on a reconnaissance mission, or to test USAF reactions and defences.

“Dutchboy” scrambled the Sabres sitting alert at Kimpo and began vectoring two four-ships of F-86s already airborne towards the radar contact. 1Lt Raymond A. Kinsey (335th FIS, 4th FIW) was the first pursuer to spot the “errant... bomber” – flying at lower altitude over the sea off the coast near Chinnampo – and diving down he made three firing passes before the bomber caught fire, “came apart, rolled over and dove into the Yellow Sea.” If this ill-fated mission was designed to test USAF defenses, it certainly proved discouraging to the KPAF's hopes of mounting any bomber attacks during daylight.

Despite this setback, Kim Il-Sung was sufficiently pleased with the bomber unit's proficiency that at one point during this period, he sent General Nam Il, the KPA chief of staff, to Andong to meet with Nie Fegnzh and urge the UAA to use their newly trained jet bombers in night attacks on Seoul, as retribution for the USAF's destruction of Pyongyang. Fearing American

retaliation against Chinese airfields north of the Yalu – “and painfully aware of the PLAAF's inability to defend them” – Nie refused to consider immediate action, however, he agreed to maintain sufficient strike forces to deter a possible US/UN amphibious assault along North Korea's west coast. Nie also encouraged and agreed to support a renewed night bombing offensive by the KPAF's 3rd Regiment, provided militarily significant targets were attacked.

In fact, USAF Fifth AF leaders were definitely concerned about the arrival of the 400-knot Ilyushin jet bombers just across the Yalu River, saying that they posed the “greatest possible threat to FEAF.” As early as 5 January 1953, Fifth AF Commander Lieutenant General Glenn O. Barcus said, “I have become greatly concerned about the possible effect of an enemy air offensive on the operational capability of this command. Our position has become more sensitive in recent months due to the continued enemy build-up and conversion to jet aircraft, particularly in such types as the Il-28 jet bomber.” From bases around Shenyang, with its 690 nautical mile (1,278km) range, all of South Korea could be targeted with bombloads up to 4,000lbs (1,814kg) – a serious strike capability. Since Andong-based MiG-15s could not escort the Ilyushin even as far as the front lines, in daylight the bomber was vulnerable to interception by the 600-knot F-86s, but the type was assessed to have a “formidable night-attack capability”. Therefore, USAF leadership feared most the very attacks – “night action deep in enemy [territory, bombing] airfields, warehouses, barracks, and other military installations of the enemy” – that Kim Il-Sung had been urging since his July messages to Stalin and Mao.

However, with the Chinese reluctance to allow such strikes from their territory, the KPAF's resumption of its “night heckler” attacks – in increased strength and frequency – was the only means the Communist coalition had for “striking back” at the US/UN forces. This is the subject of Part 13 of this study.

Douglas C. Dildy (SAFCH #844), Albuquerque, USA.

End Notes

1. Interestingly, this message also includes the very first instance of Kim requesting Stalin to consider a cease fire to end the suffering of the Korean people. Evidently the USAF/USN/UN bombing campaign was having the desired effect, at least on the people on the receiving end of the bombardment.

2. The 56th GFAR's old and well-worn Yak-9Ps were finally retired completely while its newer La-11s were transferred to the night bomber regiment. It is reasonable to assume that some of the night-qualified La-11 pilots were transferred as well.

3. While flying Yak-9Ps Colonel Tae was credited with destroying three “F-80s” during American attacks on Pyongyang

airfield (these were actually USN F9F Panthers – none were lost) on 3 July 1950. For achieving “ace status” Tae was awarded the Hero’s Medal in a ceremony in Pyongyang and was personally congratulated by Kim Il-Sung before taking his position in the 2nd FAD.

4. According to USAF “Canoe” COMINT, at this time the 2nd FAD was comprised of the 56th GFAR, which deployed forward to Langtao, and the 58th FAR (traditionally the KPAF’s training organization) that remained in the rear at Anshan.

5. 1Lt Bruno Giordano, 334th FIS, as described to author Warren Thompson.

6. The victorious Americans were Capt Manuel Fernandez (4th FIW/334th FIS) with two “kills”, Capt Harold Fischer (51st FIW/39th FIS), Capt Houston Tuel (4th FIW/336th FIS), Capt Murray Winslow and 2Lt Richard Guidroz (both 4th FIW/335th FIS) with one victory each, and LtCol George Jones, Maj Raymond Evans, Maj Jack Mass and 2Lt Joe Farris (all 4th FIW/335th FIS) sharing in the destruction of two more MiGs. USAF suffered two F-86Fs damaged, both from the 335th FIS: Mass’s 51-12957 was hit by debris from an exploding MiG-15 and 51-12976 was badly damaged by 37mm cannon fire. Both were repaired.

7. Kim’s name is also rendered as Kim Ji-Sang or Kim Si-Geng, depending on the Russian source. Additionally, it is known that this unit was augmented by

six Soviet “advisors” that not only coached the battalion and regimental leadership, but also led the Guards’ MiG formations into battle. Known only by their surnames (or codenames), at the regimental command level were Comrades Zaytsev and Pashkov, with Comrades Ostrosablin, Barsukov, Koryagin and Rublev as squadron “advisors”. According to Demin, “All of these men were fighting even more illegally than the Soviet aviation units and there are no observations of their actions in combat.”

8. Readers will notice that the location of the combat was much closer to the Yalu River than Russian sources report. While Han may have intended to patrol near Sunchon, his squadron barely crossed into Korea before engaging the 4th FIW F-86s. Additionally the accounts vary in that no USAF aircraft were damaged or lost on 28 March 1953.

9. By order of Mao Zedong signed on 6 September 1952, the PLA-Navy (PLA-N) air arm was established under the command of General Duan Suquan, a Tu-2-trained aircrew member who was formerly the 2nd Air Army commander and then deputy commander of the CPV air force and leader of the 1st UAA’s fighter command. Initially, the naval air arm consisted of a single mixed (fighter and bomber) air division formed by transferring the staff of the PLAAF’s 9th FAD and its 25th FAR (La-11s) from Tonghau airfield to the “then-empty Lalin

airport in Heilongjiang Province” on 7 October. The La-11 “escort fighters” became the PLA-N 1st Division’s 1st Flying Group (regiment). The PLAAF’s 8th BAD (then at Qiqihar) flew its Tu-2s to Lalin to become the navy’s 4th Flying Group. Most of the experienced bomber crews were then returned to nearby Qiqihar to train on Il-28s and reconstitute their bomber air division.

10. The course of instruction began with type qualification and formation flying training, followed by cross-country navigation missions, with “squadron formation bombing” practice observed in January 1953, and night flying training in March. Since Soviet instructors also administered the KPAF Il-28 aircrew instruction, it is reasonable to assume that the Korean bomber crews’ training followed a similar pattern, with completion one month later.

11. The designation of the KPAF Tu-2/Il-28 bomber unit is as yet uncertain. According to USAF “Canoe” COMINT intercepts, the pilot commanding the 27 January regiment-strength training mission had been previously associated with the 11th AAD at Fengcheng. With the retirement of almost all Il-10s at this time (20 were retained by the 10th CAD/57th AAR), it is likely that the newly-trained bomber unit replaced the ground attack division and became the 11th Bomber Aviation Division.

Additional Sources

Since this series resumed in SAFO #148, in addition to the sources listed in instalments published in previous issues, the following additional sources have been used:

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Appendix Seven

1st Unified Air Army

Order of Battle – March 1953

Commander – General Nie Fengzhi, PLAAF

Vice Commander – Major General Wang Yong, KPAF

Air Defense Command

PLAAF Contribution:

4 th Fighter Air Division	MiG-15bis	Langtao, PRC beginning Dec 52
10 th Fighter Air Regiment		
12 th Fighter Air Regiment		
6 th Fighter Air Division	MiG-15bis	Dagushan, PRC beginning Dec 52
16 th Fighter Air Regiment		
18 th Fighter Air Regiment		
12 th Fighter Air Division	MiG-15bis	Fengcheng, PRC until 31 Mar 53 (replaced by 17 th FAD)
49 th Fighter Air Regiment		
51 st Fighter Air Regiment		
15 th Fighter Air Division	MiG-15	Dongfeng, PRC beginning Oct 52
28 th Fighter Air Regiment		
30 th Fighter Air Regiment		
16 th Fighter Air Division	MiG-15	Dadonggou, PRC beginning Jan 53
31 st Fighter Air Regiment		
33 rd Fighter Air Regiment		

KPAF Contribution:

1 st Fighter Aviation Division – Colonel Kim Hi-Kiung	48 MiG-15bis	Tonghau, PRC
2 nd Fighter Aviation Regiment – Maj. Chae San-Tae		
4 th Fighter Aviation Regiment – unknown at this time		
2 nd Fighter Aviation Division – Colonel Hu Min-Kuk	49 MiG-15bis	Langtao, PRC
56 th Guards Fighter Aviation Regiment – Maj. Kim Di-San		
58 th Fighter Aviation Regiment – Maj. Shin Kang-Dong		

Associated Soviet PVO-Strany Units

64 th Fighter Aviation Corps (Note 1) – Lieutenant General Georgiy A. Lobov, HSU		Shenyang, PRC
32 nd Fighter Aviation Division – Colonel G. I. Grokhovetsky	MiG-15bis	
224 th Fighter Aviation Regiment		Dabao, PRC
535 th Fighter Aviation Regiment		Langtao, PRC
913 th Fighter Aviation Regiment		Langtao/Kuandian, PRC
133 rd Fighter Aviation Division – Colonel A. R. Komarov	MiG-15bis	
147 th Fighter Aviation Regiment		Shenyang-West, PRC
415 th Fighter Aviation Regiment		Shenyang-West, PRC
726 th Fighter Aviation Regiment		Anshan, PRC
216 th Fighter Aviation Division – Colonel Aleksandr G. Shevtsov	MiG-15bis	
518 th Fighter Aviation Regiment		Dadonggou, PRC
676 th Fighter Aviation Regiment		Dabao, PRC
878 th Fighter Aviation Regiment		Dadonggou, PRC
Night Fighter Unit:		
298 th Indep. Fighter Aviation Regiment – LtCol V. A. Vasil'ev	MiG-15bis	Dadonggou, PRC

Other KPAF Combat Units:

3 rd Fighter Aviation Division	34 MiG-15s (25 operational)	Yanji, PRC
Fighter Aviation Regiment designations not yet known		
10 th Combined Aviation Division – Brigadier General Li Fart		Unknown
1 st Fighter Aviation Regiment	24 La-9	
57 th Assault Aviation Regiment	20 Il-10	
11 th Bomber Aviation Division	39 Il-28; 14 Tu-2	Kungchuling, PRC
Individual Bomber Regiment designations not yet known		
3 rd Night Bomber Regiment – Colonel Pak Den-Sik		
1 st Night Bomber Battalion	6 Po-2/5 Yak-18	Sariwon, DPRK
2 nd Night Bomber Battalion	approx. 12 Yak-11/-18	Sinuiju, DPRK
3 rd Night Assault Battalion	approx. 12 La-11	Anshan, PRC



Due to the extreme sensitivity of Russian pilots flying and fighting in the Korean War, and the stringent secrecy surrounding their participation, there are very few photos of Soviet MiGs operating from the Andong complex of airfields. However, once the 351st OIAP converted to the MiG-15bis and began having success against USAF B-29 night bombers (see SAFO #149), its aircraft, pilots and ground crew – as seen here – were featured in a number of propaganda photos. (Tim Callaway)



After Lt No KumSok defected with a MiG-15bis in September 1953, USAF Intelligence had him dress in his flight gear for photographs before examining and evaluating the Soviet-made equipment. (USAF)

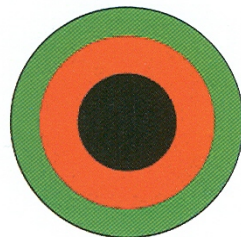


Lt No Kum-Sok in full flight gear. Note the lack of an anti-G suit to help the MiG pilots sustain the stresses of high speed/high-G aerial combat. This deficiency resulted in heavy fatigue and correspondingly high “sick rate” among MiG pilots in 1952-53. (USAF)

AFGHANISTAN



1924-29



1937-67



1967-79



1979-83

[Editor's Note: This page and the following one are a reproduction of the corresponding pages from John Cochrane's book *Military Aircraft Insignia of the World* - except as modified to fit SAFO's computer limitations. A review of this book appears on page 66 of this issue of SAFO.]

The first military aircraft arrived in Afghanistan from Russia in 1921, but the air arm was not established until 22nd August 1924. Its few aircraft were destroyed in the revolution of 1929 and a new force was not reformed until 1937.

During the early period the aircraft, mostly of Russian origin, bore the Muslim-based arms of Afghanistan in black on white, and the legend 'Allah u Akbar' (God is great) below the wings together with the Afghan flag and coat of arms. Mohamed Nadir Shah, the victor in the 1929 insurrection, changed Afghanistan's colours from largely red to red, green and black, symbolising bloodshed for independence, hope for the future, and the country's dark past. These colours were carried as rudder stripes. There is some evidence of a four-colour roundel, black, red and green with a white centre. The central spot being inscribed with the phrase 'Allah u Akbar'. The use of this marking has no photographic confirmation and its use is very unlikely.

On the reorganization of the air arm in 1937, aircraft were released from British stocks in India, and the RAF roundels were over-painted in Afghan colours. Additionally some aircraft may have sported red, green and black stripes across the wings.

The Royal Afghan Air Force was formed in 1948, and the roundel continued in use until 1967. In the early 1950s the rudder striping gave way to a similarly marked fin flash. In 1967 a new insignia consisting of a three-colour segmented triangle within a white circle was carried on wings, fuselage and fin. The white surround featured the initials of the Afghan armed forces in Arabic script.

The monarchy was overthrown in 1973 and the country fell further within the Soviet sphere of influence. The triangular insignia continued in use until the Russian invasion of 1979, probably with different letters on the roundel. After 1979 a red disc with yellow inscriptions was adopted and later, in 1983, a red star within a circle of the Afghan national colours.

Following the departure of the Soviet forces in 1989 there was a complete breakdown of the government, and various dissident groups carried their own markings, many of which were discovered during the Allied invasion of 2002. Examples include possible Taliban aircraft which carried roundels of black, white, green and white, and Hezb-a-Wahdat, using a green disc with a black border with various symbols, or others with similar markings with a central small white spot. The Northern Alliance used the triangle insignia without the red portion.

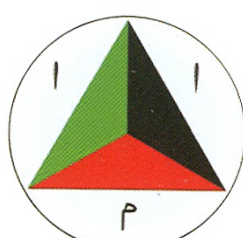
The three coloured triangle of 1967-1979 has been reintroduced with a new inscription, which was changed in 2010 with a change of the name to the Afghan National Army Air Force.



1983-94



1996



2000



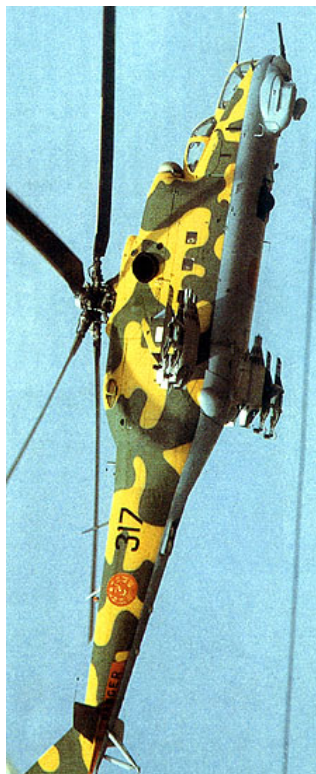
2010



Northern Alliance



A Royal Afghan Force Hawker Hind ex-RAF India 1938, now at RAF Cosford.
(Greg Kozak)



An Afghan Mil-24, 1982. (Greg Kozak)



Afghan MiG 21, supplied by the USSR, at Bagram air base 1998. (Greg Kozak)



A Northern Alliance anti-Talaban group MiG 21 2002. (Greg Kozak)



A US-supplied Afghan Cessna Grand Caravan, 2010. (Greg Kozak)

[Editor's Note: These are the same photos that appear in John Cochrane's *Military Aircraft insignia of the World* – except the sizes have been increased.]

Miscellaneous Afghan National Insignia

From the archives of Greg Kozak



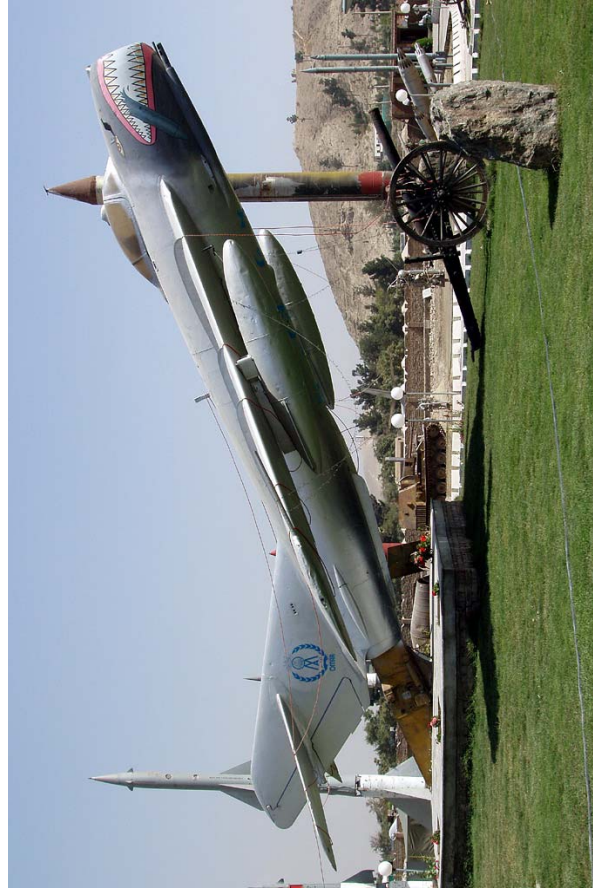
Mi-17 featuring one of the various roundels used by the Taliban.



Afghan Special Forces Mi-8 with tail boom stripes in the national colors.



Northern Alliance An-26 of the Masoud faction with roundel in light-blue disk.



MiG-17 at military museum outside Kabul with non-operational markings.



MiG-21MF gate guard with old cockade-style markings.



Northern Alliance An-32- note apparent absence of green segment in tail roundel.



Mi-172 in the markings of the National Police.



Mi-8 in 1979-1983 pre-DRAAF markings under repair.

UNFINISHED PROJECTS FILE



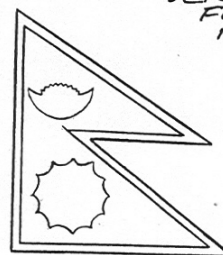
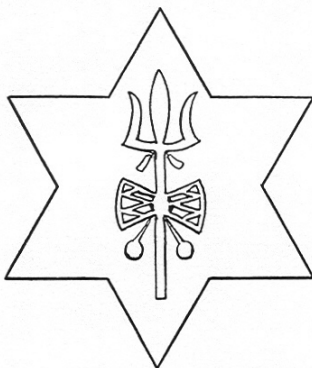
SAFO MISCELLANY IV

ROYAL NEPAL
ARMY AIR WING
[1971]

Nepal

NOTE: THESE RECENTLY REDISCOVERED FRAGMENTS WERE ORIGINALLY INTENDED AS A FOLLOW-UP TO THE "SAFO MISCELLANY" PAGES FROM THE FIRST FEW ISSUES OF SAFO IN THE 1970s: I. CEYLON, II. BURMA, & III. OMAN.

[ROYAL NEPALI
ARMY AIR
SERVICE
FOUNDED
IN 1971.]



NEPAL FLAG —ALSO USED AS FIN-FLASH:
WHITE MOON AND SUN ON RED, WITH BLUE BORDER
[Previously, the sun and moon displayed faces.]

VARIATIONS of the EMBLEM of the ROYAL ARMY OF NEPAL:
WHITE ON RED and BLACK ON RED WITH A WHITE BORDER

[The symbols represent two of the many aspects of the Hindu god SHIVA: the trident (TRISHULA) as a weapon of sovereignty of "Shiva the Defender/Destroyer" and the hand-drum (DAMARU) of "Shiva the Eternal Dancer."]

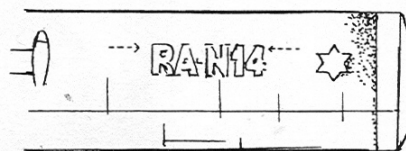


PILOT'S BADGE
Black KUKRIs and wings on light blue,
all on an olive-drab cloth patch.

RA-N14

WHITE CODES

AIRCRAFT
GREEN OVERALL



ORANGE
WING TIPS

ORANGE
FIN TIPS

APPROX. POSITION OF UNDERWING
MARKINGS. (Should be same size as on fus.)

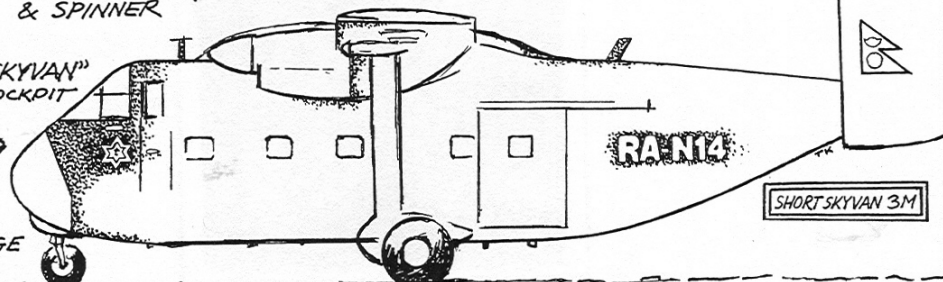


SILVER NACELLE (FRONT HALF)
& SPINNER

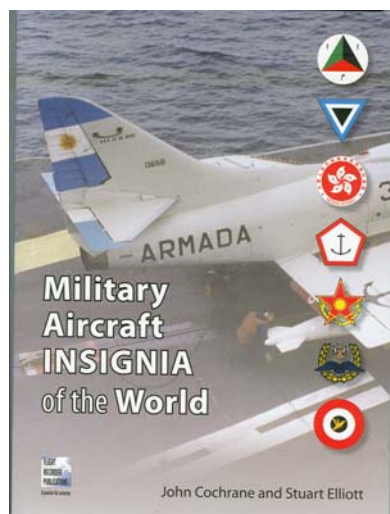
WHITE "SKYVAN"
UNDER COCKPIT

Emblem:
- Longer black trident.
- Higher white & black drum.
- Wider white border.

ORANGE
NOSE



T. KOPPEL (SAFCH #118)



Military Aircraft Insignia of the World, by John Cochrane & Stuart Elliott. 142 pages (20 mm by 270 mm). Softbound. Published by Crécy Publishing. www.crecy.co.uk. £14.95 UK; \$22.95 USA. (2014).

John Cochrane (SAFCH #905) eagerly-awaited book on the national insignia carried on military aircraft has finally been published - and the wait has been well worthwhile. The history of military aircraft insignia for 216 countries is presented in well-researched text, excellent color drawing of insignia, and carefully selected photos.

Rather than try to describe the quality of this work in words, a reproduction of the pages on Afghanistan will be found elsewhere in this issue of SAFO. It accurately presents all the information in John's book - only the format has been changed to fit SAFO's computer limitations. The photos from this chapter have been enlarged. (Many of the photos in the book are too small.) This is followed by two pages of photos of Afghan aircraft from the archives of Greg Kozak (SAFCH #1599). I was pleased to see that so many SAFCH members contributed to the success of this highly recommended book.

A detailed review, by Krishna Jaga (UK), was published on amazon.com, and is presented here (with slight editing).

"Books on the history of aircraft roundels are very rare. This is a real labour of passion. It has taken almost 15 years since the publication of the first edition with the same title by the same

authors for a publisher to finally release an update on this exotic subject.

"If ever you wondered on all the historical roundels for a particular country and where could you look it up - this book has it all. The authors have kept in touch with many enthusiasts around the world and researched some of the really rare historical roundels for this updated edition.

"It's in glorious full colour - and comprises 142 pages (the authors originally planned two volume which Crécy compressed into a single volume), depicting all the roundels for all countries as well as all the roundels for countries which no longer exist like Katanga, Biafra, South Vietnam, etc approx 500+ in all. The new roundels include Abkhazia, Iraqi, Chad, Afghanistan, etc., but Iraq 2006-9 and Abkhazia 1992-2008 are missing.

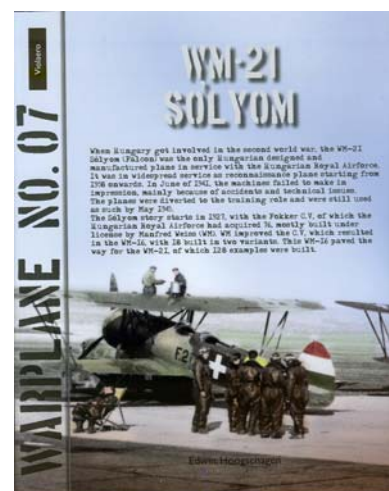
"The updated edition features colour photos (some are very tiny and unclear), but the diagrams of fin flashes as in the previous edition are missing. This was a real disappointment for me and I will need to retain the first edition due to the diagrams. For some of the countries, like South Sudan and Kurdistan, the authors state that the national flag is used. In these cases, it would have been appropriate to display the flag.

"Some of the text also could have done with an update from the first edition (example for India) and some of the navy roundels are also missing, and I think there are more historical roundels for Bulgaria than shown.

"This book could have done with another 50 pages if the publisher had been more generous and included more photographs and artwork to show the fin flashes. Also, it should have been published in a bigger size like the first edition by Airlife. Nevertheless, I am quite excited as it's a long awaited update on this esoteric topic and a must buy."

Your editor thinks this is an honest appraisal of the book, and has only two further comments. The appendices are very welcome: "Index of Countries" allows the reader where to find details of counties whose data are part of a larger county (e.g., Puntland). The "Index of Aircraft" that lists 149 a/c will be useful

for the modeler who is searching for a unique color scheme for his latest project.



Weiss WM-21 Solyom, by Edwin Hoogschagen. Warplane #7. 48 A-4 pages. Softcover. In English. Published by Lanasta, Slenerbrink 206, 7812 HJ Ennen, Netherlands. info@lanasta.com. € 13.95.

It was a very pleasant surprise to receive a book on an Hungarian WW2 reconnaissance biplane - the Manfred Weiss WM-21 - and it's in English. The book, #7 in Lanasta's "Warplane" series comes from the Netherlands. This not surprising since the Solyom had its genesis in the Fokker C.5.

After the end of WW1, the victorious Allies dismembered the Austro-Hungarian Empire. The part that became Hungary was prohibited from building aircraft or having an air force. When these restrictions were relaxed in 1927, Hungary acquired 76 Fokker C.5E, some directly from Fokker, but most built under license by the Manfred Weiss company. In the ensuing years, Weiss improved on the C.5E resulting in the WM-16 of which 18 were built in two versions - the Budapest A and Budapest B. In the 1930s, the Budapest was completely redesigned with a modern thin wing and a more powerful engine resulting in the WM-21 Solyom (Eagle) of which 128 examples were built.

This book covers the development of Hungarian C.5E, Budapest, and Solyom and their participation in the numerous conflicts and small wars that occurred while Hungary tried to recover its "lost territories". The first of these was a series of conflicts with the newly-formed

Slovak State that resulting in the recovery of territory in Sub-Carpathia and in eastern Slovakia. This was followed by a conflict with Romania over Transylvania that was mediated by Hitler's Germany. During WW2, the Solyom participated in the German invasion of Yugoslavia and in the fighting on the Eastern Front. In all of these conflicts, the author concentrates on the participation of the Solyom – a decision that is much appreciated since the Hungarian fighter and bombing units have been well covered in other publications.

The book is well produced with 101 well-reproduced photos of the Hungarian C.5E, Budapest, and Solyom. There are 5 color profiles and two 2-view color drawing showing the various color schemes employed on the Solyom including the early tri-colored chevron nation insignia and the later white cross national insignia with colorful tail feathers. Of particular interest are the seven color drawings of the seven recon units that used the Solyom (and Hungarian He 46) on the Eastern Front.

Reconnaissance aircraft have received little attention compared to the more glamorous fighters and bombers. Therefore, this book is most welcome – particularly by SAFO readers since it covers a little-known aircraft of a small air force. It is highly recommended.



A Serviço do Generalíssimo: Os Pilotos Brasileiros na República Dominicana, by Hélio Higuchi, 6 1/4 x 9", 199 pages in Portuguese (Brazilian), one color photo,

47 b/w photos, eight color side-views, one map. Published by C & R Editorial, São Paulo-SP, Brazil; ISBN 978-99719-21-3, availability via the author by contacting him at atendimento@revistaasa.com.br.

Frustrated after intensive training during WWII, a group of young Brazilian Air Force pilots found incredible adventure, intrigue and yes, even romance, in the post-war years in a most unlikely setting – Generalissimo Rafael Trujillo's Dominican Republic!

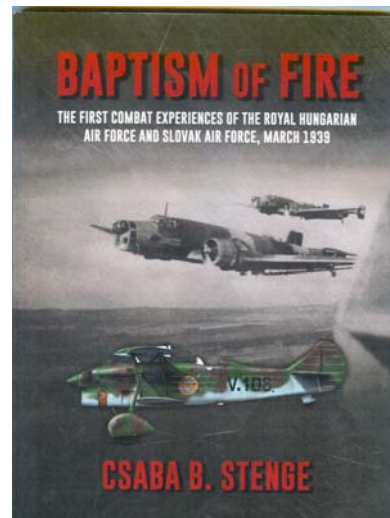
Brazilian aviation historian Hélio Higuchi has crafted this soft-bound account, stranger than fiction, in his native language which has for the first time recounted the background of the amazing growth of Trujillo's Cuerpo de Aviación Militar Dominicana (CAMD) in the late 1940s – and how the struggle to find pilots to man them ultimately led to this strange odyssey. Based largely on the logs and personal accounts of one of them, Nilton Miguel Ajuz, the story also describes yet another extremely obscure interlude – a plan to bomb Venezuela in 1948 using clandestine North American B-25s which had allegedly “disappeared” in route to Brazil at Belém!

Although the entire book is in Portuguese, I think most interested readers could make their way through most of the story with the aid of an on-line translation program – and this, combined with the tables and illustrations provided, will prove of special interest to small air forces enthusiasts.

The reviewer is pleased that he was able to provide a number of the extremely rare illustrations included, but which were supplemented by previously unpublished images taken by the young adventurers themselves. These include a wonderful lineup image of four CAMD Bristol *Beaufighter* VIF's including s/n 2406 – which was a thrill to see.

Hélio is to be congratulated for this outstanding addition to the literature on an exceptionally difficult subject, and this book deserves a place on every SAFO readers book shelf!

Dan Hagedorn (SAFCH #394), USA



Baptism of Fire, by Csaba B. Stenge. 128 pages 9.75 by 7.25 inches (250 mm by 190 mm). English Language Contains 17 colour artworks of mainly Hungarian AF aircraft. Published by Helion Books in the UK at £21-95 <http://www.helion.co.uk>.

The Hungarian/Slovak fighting of 23/24 March 1939 was, compared to what was to follow, basically a border skirmish. Hungary was anxious to regain the direct contact with Poland lost after World War 1 and took advantage of the Nazi German dismantling of Czechoslovakia to do so. All in vain as by the end of September their neighbour had become the Soviet Union with whom they were at war by 1941!

The author has delved deep into the archives that have survived and spoken to various surviving participants to give a lucid yet detailed account of this border war. As the Hungarian and Czech languages don't easily trip off the Western European tongue he has done the Small Air Force Enthusiast a great favour

The text consists of an Authors Note and Introduction which set the scene in context and the six chapters which cover:

- 1 Occupation of Sub-Carpathia
- 2 23 March
- 3 24 March
- 4 Air Raid on Spišská Nová Ves
- 5 Epilogue
- 6 Conclusions

There are then nine Appendices covering comparative ranks, victories claimed, aircraft details, decorations awarded, lists of Slovak crews, biographies of Hungarian victory

claimants, etc.

Throughout the text are a good selection of rare photographs of aircraft, places and people. The last appendix is out of context but still interesting showing the CR32's of the Ijasz squadron in 1941.

A good introduction to a little known conflict

Malcolm Barratt (SAFCH #1716) UK.



Hungarian Fighter Colours 1930-1945

Vol. 2, by Denes Bemad and Gyorgy Punka. 8.5" x 12". 205 pages. Entirely in English. Hard cover. MMP Books White Series No. 9122. Available online from www.mmpbooks.biz. UK Price £35-00.

This is the eagerly awaited (by me anyway!) second volume of an excellent guide to Hungarian Fighter Colours. The page numbering is consecutive to Vol. 1, so we start at page 190.

After a glossary of Hungarian - English terms we come to the subject matter which is again dealt with in date order and commences with the He 112. Various oddities such as the Avia B-534, PZL P.11c, and the indigenous WM-23 are dealt with before we get to the Re 2000 Heja and MAVAG Heja, the Bf 109, Bf 110, and Me 210Ca-1, and lastly but not least, the Fw 190.

All of these, as in Volume 1, are illustrated with rare and unusual photographs and the usual excellent artwork.

The Appendices consist of an interesting explanation of how one of the profiles was derived from a photograph - this should encourage a few budding

illustrators! Also, a short piece on Unit structure and a Bibliography, most of which consists of Hungarian language publications.

Last of all is a listing of all Hungarian 'Aces' with tabulated lists of victories down to as few as one.

Scattered through the text are several rare colour photos taken at the time and also fragments of aircraft that were recovered and serve as colour samples

Taking into account that most of the information was collected during the Communist regime under trying circumstances, these two volumes are quite remarkable

Malcolm Barratt (SAFCH #1716) UK.

[Editor: I second Malcolm's comments about the high quality of this publication. However, I would like to emphasize that each chapter begins with a detailed history for the type in Hungarian service; followed by an informative discussion of the "Camouflage and Markings".

Some statistics (pages, photos, color profiles, color plan views): "Heinkel He 112: An Elegant Passer-By" (9,16,2,0). "Avia B-534: A Bird Captured in Combat" (5,8,3,0). "PZL P.11a: The One that Got Away" (4,9,2,0). "WM-23: Hungary's Silver Arrow" (5,4,2,0). "Reggiane Re.2000 Héja/MAVAG-Héja: Hungary's Italian Monoplane Fighter" (44,66,12,2). "Messerschmitt Bf 109G: The Hungarian's Ultimate Fighter" (57,103,18,2). "Messerschmitt Bf 110: An Unemployed Night Fighter" (12,29,4,1). "Messerschmitt Me 210Ca-1: Uneasy Night Fighter and Unproven Heavy Fighter" (7,14,2,0). "Focke-Wulf Fw 190: A Fighter-Bomber that Also Hunted" (15,19,7,10).

The 41-page Appendix "Aces" has tables for each Hungarian pilot who scored one or more victories. These tables list date, type of a/c destroyed, location, and notes. The type of a/c flown by the victor is not included.

The price is high, but so is the quality of the research and presentation. Highly recommended for both the historically minded and the modeler.]

Le Groupement 'Patrie' et le GB I/34 Béarn en Opérations: août 1944 – Février 1945. Ciel de Guerre #25. 78 A-4 pages. 14.00 € Published by Artipresse. cieldeguerre@yahoo.fr.



As the Allied armies liberated Western Europe and pushed the Germans back towards the Rhine, pockets of resistance remained on the Atlantic coast of France. The elimination of these pockets was assigned to units of the French air force. This issue of Ciel de Guerre tells the story of these actions in 78 pages of French text, 3 maps, 89 photos, and 20 color profiles.

The extent of the coverage can be summarized by counting the aircraft covered by the 20 color profiles: Douglas A-24 (4) & DB-7 (2); Glenn Martin 167 (3); Lockheed C-60 Lodestar (1); Bf 110 (1); Me 108 (1); Mauboussin 129 (1); Siebel 204 (1); PBY-5A (1); Cessna UC-78 Bobcat (1); Nord 702 (1); Caudron Gowland (1); MS-500 Storch (1); and Dewoitine D.520 (1). It should be emphasized that all color profiles are of aircraft in French markings – even the Bf 110 which is supported by a number of photos.

Ciel de Guerre #25 is recommended both for the aviation enthusiast interested in learning about a neglected WW2 campaign and to the modeler interested in adding some uniquely-marked aircraft to his collection.

RAAF Colour Schemes & Markings, 1921-1951: Parts 14a and 14b. Aviation History Colouring Book. 28 A-4 pages each with photos, ink profiles, and reproduction of official documents.

With these two issues, Ian Baker completes his monumental series on RAAF colors and marking from 1921 to 1951.



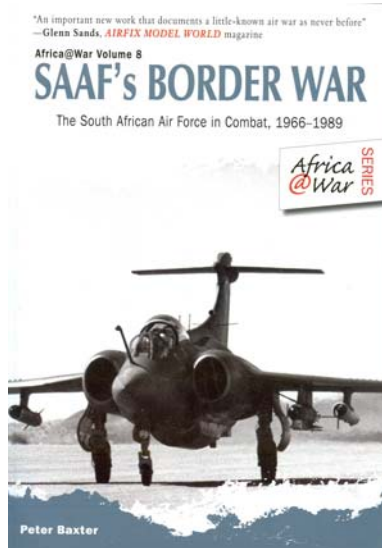
Issue 14a (AHCB #82) covers the post-war period from 1948 to 1951. It starts with a 4-page background of the time period from the Australian viewpoint, followed by a one-page discussion of RAAF and RAN color schemes and markings directives for the period. Then one page each is devoted to text, photos, and drawings of the following aircraft. RAAF: P-51D Mustang, Meteor F.8, CA-18 Mustang Mk.23, Lincoln Mk.30A, Lincoln Mk.31, and P2V-5 Neptune. RN & RAN: Sea Fury F.10, Sea Fury FB.11, Firefly Mk.5, and Firefly Mk.5. USN: Sikorsky HO3S-1.

The final two sections are reproductions of "Finishes & Markings of Aircraft, Jan 1948" and "Aircraft Standard Markings, July 1951".

Issue 14b (AHCB #83) puts a capstone on the series with a 6-page reproduction of official drawings relevant for the entire series and an 8-page index listing all topics including an alphabetical list of all aircraft drawings from Oxford MK.II V3354 to Westland Wapiti Ila A5-14. (Three pages are devoted to a revisit to the Seagull III with 3 photos and a multi-view drawing.)

This series is recommended to everyone interested in accurately drawing or modeling RAAF aircraft. For example, did you know that RAAF Mustangs carries two different color schemes? (1) Overall bare metal apart from the smoothed and filled wing surfaces and fabric rudder covering which were painted Aluminum. (2) Overall smooth, bright Aluminum-pigment cellulose enamel and dope.

AHCBs are obtainable air mailed directly from Ian Baker. 31A Mercer St., Queenscliff, VIC. 3225, Australia. E-mail: ianbaker@arc.net.au. Booklets are also stocked by several specialist bookshops & hobby shops: USA: M&Models (Illinois). UK & Europe: Mushroom Model Publications.).



African Air Force in Combat 1966-1989, by Peter Baxter. Africa@War Volume 8. 64 A-4 pages. Softbound. (2012) Published by Helion & Company. Email info@helion.co.uk. Website www.helion.co.uk.

This is the first of the Africa@War series that deals specifically with the activities of an air force. As the subtitle suggests, South Africa was involved in a

series of insurgencies on its northern borders between 1966 and 1989. During these conflicts, the SAAF played a major part in the air superiority role and in the close support and supply of ground forces.

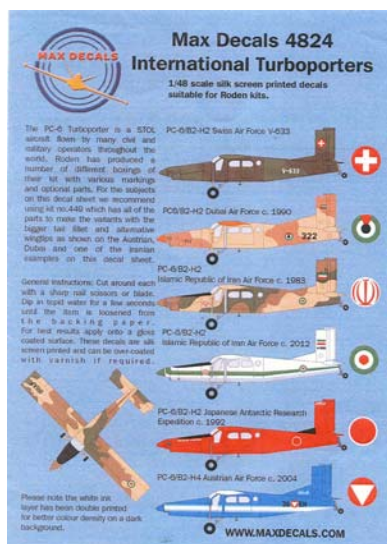
After a 10-page background on the SAAF, the remaining 54 pages describe in exquisite detail the SAAF involvement in the civil wars in Namibia, Angola, and Rhodesia.

The extremely-readable text is complimented by 11 pages of beautiful color profile drawings [Mirage IICZ (2), Mirage IID2Z (2), Mirage IIRZ ((2), Mirage IIR2Z (2), Mirage F1CZ (4), Mirage F1AZ (4), Impala MkII (2), Buccaneer, Canberra, Atlas AM3C Bosbok, Cessna 185, Atlas C4M Kudu, Harvard II, C-47, DC-4, C-160 Transall, C-130 Hercules, SA-316 Alouette III, SA 330 Puma (2), & SA-321L Super Frelon; and top-and bottom view of Mirage III (2), Mirage F1 (2), C-47, & Impala (2)]. There are also 5 pages of well-reproduced color photos.

Of special interest are the descriptions of combat between the SAAF Mirages and Angolan MiGs: The first occurred on 6 November 1981 when SAAF Mirage F1CZ, s/n 203, shot down an Angolan MiG-21. A year later, on 5 October 1982, a second Angolan MiG-21 was shot down by the same SAAF F1CZ. The tables were turned in 1988 when SAAF F1CZ, s/n 206, was severely damaged by an AA-8 while in a dogfight with an Angolan MiG-23. These encounters are fully described in the text, and the Mirages involved are illustrated by color profiles. For its first 'kill', Mirage F1CZ, s/n 203, was in the standard SAAF camouflage of Deep Buff and Olive Drab over Lt Admiralty Grey. For the second 'kill', it was in a low-vis camouflage of Highveldt Grey, PRU Blue, and Mirage Grey. All color are identified by their BSC number. Mirage F1CZ s/n 203 is illustrated by a color profile in standard SAAF 3-tone camouflage.

The other, no less exciting day-to-day operations, of the SAAF are also described in great detail. This book is well-researched and the text is complimented by many b&w and color photos as well as the profile drawings. It is recommended to anyone interested in the SAAF or in African air wars.

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International Turboporters. 12 Euros.

Order via: www.maxdecals.com

Max decals have been making a name for themselves as providers of offbeat modelling projects for quite a few years. A search of their catalogue is strongly advised.

This sheet contains six different subjects all of which should appeal to the SAFCH modeller membership. The recommended kit is Roden #449 although there is one example which requires a little expertise!

Subjects are :

Swiss Air Force V-633

Dubai Air Force 322 c.1990

Islamic Republic of Iran c.1983

Islamic Republic of Iran c.2012

Japanese Antarctic Research

Expedition c.1992

Austrian Air Force c.2004

Three- or four-view plans are given showing colour schemes and marking layouts.

Needless to say my choice of subject, the JARE aircraft, will require a set of snow skis making use of many photos of this aircraft JA8221 on the internet. Who said modelling was always simple?

From past experience of Max Decals, I can recommend them wholeheartedly.

Now all I need are some colour shots of the Japanese Beavers used in the Antarctic in the 1960's!

Malcolm Barratt (SAFCH #1716) UK.

-letters-letters-letters-letters-letters-letters-letters-letters-letters-letters-

"May I make a remark concerning the article about Bre XIVs in SAFO #149. In the Datafile about the Breguet XIV by Alan Toelle there is a photo showing two Polish a/c from above. One sports the fin and elevator markings of the Middle Lithuanian Air Force, BUT with Polish "chess-boards" on the upper wing and the standard five-colour French cammo scheme is also obvious. Therefore, the side-view in SAFO sporting solid green upper surfaces seems questionable. Concerning the national insignia: maybe the Bre XIV in the photo is in the process of being repainted after returning to its home-base OR the Middle Lithuanian markings were only on the underside (trigger-happy infantry having

missed the latest instruction in aircraft-recognition)."

Nils Treichel (SAFCH #1467), Germany.

"I've had #149 for around a week now and have finally got around to reading it! As ever you have found some hidden byways of aviation that I have never heard of: Army of Central Lithuania; Hawker Hunters in Lebanon - I'd always thought they'd been 'taken out' during June 1967 (live and learn time); The ever interesting NKPAF saga; Operations Dawn (almost makes helicopters interesting); Yugoslav B-24s (who knew till now).

"Nearest I can get to KP's Yak 52 is a sedate flight in a Czech Zlin 42 many years ago (I consider taking off and landing to be aerobatic enough).

"Denys Voaden's letter on transcribing names is highly pertinent. I always remember someone telling me that 'foreigners should write things the way they are pronounced'. I always thought we did. I've never quite recovered from finding out Reims is pronounced RRRonsce! And that van Gogh - contrary to most Hollywood films - is not van Go (instruction to a UPS driver?) but van Kokh. Confusing isn't it?"

Malcolm Barratt (SAFCH #1716), UK.

-abstracts-abstracts-abstracts-abstracts-abstracts-abstracts-abstracts-abstracts-abstracts-

CZECH REPUBLIC

Revi These and other issues are available from SAFCH Sales Service: \$5.00 per issue plus postage.

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With the lower fuselage hatch open, HUP 51- 16623 '947' displays the lower roundel and earlier wide high-visibility marking application.
Photo: Shearwater Aviation Museum.



Hovering between hangars at Dartmouth, HUP 51-16623 '947' prepares to lift equipment onto the control tower. *Photo: DND, via Leo Pettipas.*



HUP 51-16623 '623' carries the last code the HUP helicopters used.
Photo: DND.



On the ramp at Patricia Bay, HUP 51-16621 '621' awaits use with VU 33. *Photo: VU 33, via Langley Museum of Flight.*

HUP codes 1954-1963			
51-16621	51-16622	51-16623	
945	946	947	
245	246	247	
405	406	407	
921	922	923	
621	622	623	



HUP 51-16623 '247' approaches the stern of *HMCS Labrador* in broken ice pack conditions. Photo: CFB Esquimalt Naval & Military Museum VR2004.471.114.



HUP 51-16622 '622'; was the last of the three helicopters to join VU 33 at Patricia Bay. It was the only HUP to have the White Ensign (*non-standard*) applied and the narrow Volcano Red band. Photo: DND/E-73008.



HUP 51-16623 '247' from HU 21 sits on the deck of *HMCS Bonaventure* on March 19, 1957. The helicopter arrived from *HMCS Labrador* visited *HMCS Bonaventure* on March 19 and 29. The 'Buzz Bears' artwork was first painted in 1955 and repainted and improved in 1957 (by P2RA Ken Cann). Photo: DND/BN-502.